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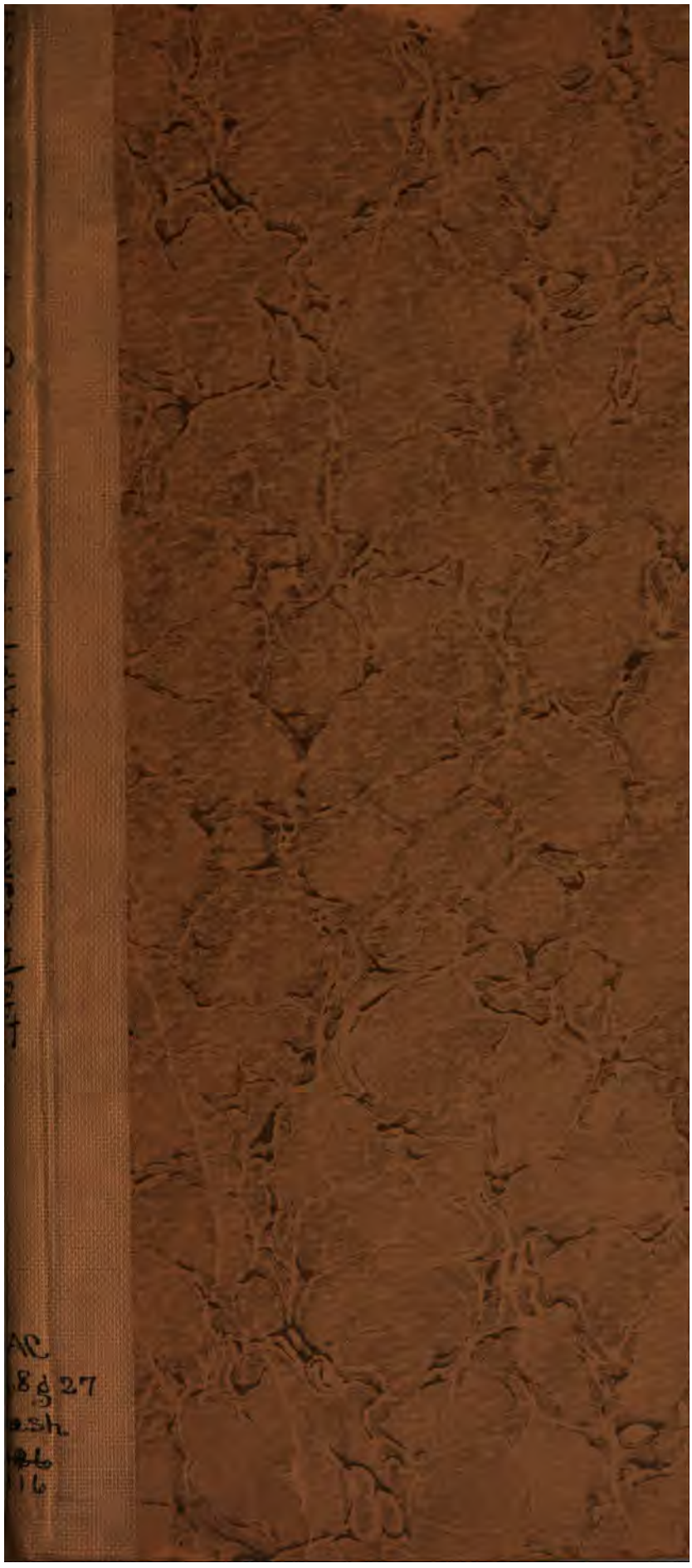
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CENTRAL HEATING, LIGHTING, AND POWER PLANT ON THE MALL, IN WASHINGTON, D. C.

HEARINGS

BEFORE THE

COMMITTTE ON THE LIBRARY UNITED STATES SENATE

US Congress. SIXTY-FOURTH ~~CONGRESS~~ Senate.
FIRST SESSION

ON

S. J. RES. 92

RELATIVE TO THE CONSTRUCTION ON THE SITE SELECTED OF THE CENTRAL HEATING, LIGHTING, AND POWER PLANT AUTHORIZED BY THE PROVISIONS OF THE SUNDRY CIVIL APPROPRIATION ACT APPROVED JUNE 23, 1913

Printed for the use of the Committee on the Library

WASHINGTON
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Lithomount Pamphlet Binder

CENTRAL HEATING, LIGHTING, AND POWER PLANT ON THE MALL.

THURSDAY, FEBRUARY 3, 1916.

UNITED STATES SENATE,
COMMITTEE ON THE LIBRARY,
Washington, D. C.

The committee met at 4 o'clock p. m. for the purpose of considering the following joint resolution, introduced by Senator Newlands:

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That inasmuch as the plans adopted for the construction of the central heating, lighting, and power plant authorized by the provisions of the sundry civil appropriation act approved June twenty-third, nineteen hundred and thirteen (Thirty-eighth Statutes at Large, page twenty-five), on the site selected raise serious questions affecting the appearance of the city of Washington and the desirability of erecting said plant according to said plans, the Secretary of the Treasury be, and he is hereby, directed to submit these plans to Congress, together with all reports from commissions, architects, engineers, and others who have been consulted in connection therewith; and that no work upon the construction of said plant shall be commenced until plans therefor shall have been approved by the President of the United States.

Present: Senators Williams (chairman) and Newlands.

The CHAIRMAN. I would like to inquire, preliminarily, have any of you gentlemen thought this matter out far enough to have any definite ideas concerning where that plant that is to furnish this heat, power, and light could be placed?

Mr. CASS GILBERT. I am only here as representing the Commission of Fine Arts. Mr. Jennings asked me if I had studied it. I will say that the matter has not come before the Commission of Fine Arts.

The CHAIRMAN. That is the gist of it, for everybody is agreed that we do not want the plant there. It is unsightly in itself, and mars the landscape and destroys the beauty of the whole situation, and yet a public building has got to have heat and light.

A few days ago I took the liberty of sending a note to Mr. Elliott Woods, who is Superintendent of the Capitol Building and Grounds, asking him to figure out as to whether he could or could not supply heat, light, and power from the Capitol plant in Garfield Park, and the I sent a note to Col. Harts and asked him to look into the question as to whether a site could not be found in the industrial part of Washington for a new plant. Mr. Woods seemed to be pretty certain that he could send the light that distance easily enough but was not certain about the heat. This is Mr. Elliott Woods's reply to my letter:

OFFICE OF THE SUPERINTENDENT,
CAPITOL BUILDING AND GROUNDS,
Washington, D. C., February 3, 1916.

Hon. JOHN SHARP WILLIAMS,
Chairman Joint Committee on the Library,
United States Senate.

DEAR SENATOR WILLIAMS: I have received your letter of February 1, 1916, regarding the complaints of the Fine Arts Commission with reference to the

proposed plant at the foot of Fourteenth Street, to be erected by the Trea Department, to supply heat, light, and power to the various Government bu ings already in position, and including those to be erected. You state tha has been suggested to you that the light, power, and possibly the heat coul furnished from the existing Capitol power plant, and you ask me to make estimate of the cost for the necessary additions to that plant and for the o things required to accomplish the purposes suggested. The figures whic present solely at your request, and which are intended to follow the three gestions made in a personal conversation of day before yesterday, must considered as approximate, since the consideration of a matter of so great portance requires much more study than this brief intervening period of t could possibly allow. They are presented with the understanding that t are not accompanied by any recommendations on my part, or any inten to be discourteous to the Congress which authorized the construction of Treasury plant, or to the officials connected with the Treasury Department

It might also be stated that as these figures have been made up purely u our own personal judgment as to layout, etc., that they may be in some spects, widely at variance with the figures already made by the technical partment of the Supervising Architect's Office. Also that they have no bea upon the proposition set forth in the amendment to the urgent deficiency authorizing the extension in the increase of cost.

Extension of Capitol power plant to supply heat, light, and power comp to building lines only.

Extension of building, storage, etc., for power plant proper	$125,
New boiler equipment	180,
New turbo generator and equipment	60,
Incidentals	10,
Total	375,
16,600 feet of tunnel, at $15 per foot	250,
17,600 feet 14-inch pipe.	
5,600 feet 9-inch pipe.	
4,800 feet 7-inch pipe.	
2,200 feet 5-inch pipe.	
1,000 feet 4-inch pipe.	
2,000 feet 2-inch pipe.	
17,600 feet 4-inch return pipe.	
50,800 feet pipe, including flanges, covers, and pipe racks	154,
Expansion joints	24,
Reducing valves	2,
Other valves	1,
Steam traps	
Access and ventilating manholes, etc	2,
Cable, high and low tension	96,
Ducts for cable	8,
Labor for connecting up cable	35,
Total	574,
Grand total	949,

Extension of Capitol power plant to supply high-tension current to three s stations and steam to the west side of Fifteenth Street to connect with proposed steam line of the central power plant.

Extension of building, storage, etc., for power plant proper	$125,
New boiler equipment	180,
New turbo generator and equipment	60,
Incidentals	10,
Total	375,

8,800 feet tunnel, at $15 per foot	$132,000
17,600 feet 14-inch pipe, including flanges, covers	113,572
8,800 feet 4-inch return pipe	1,000
Steam traps	802
Expansion joints	16,936
Reducing valves	450
Other valves	500
Pipe supports	2,500
66,200 feet high-tension cable to three substations	45,678
98,400 feet duct	4,920
Labor in connection with this proposition	20,000
Total	338,358
Grand total	713,358

Electric supply only to substations.

New boiler equipment	180,000
New turbo generator and equipment	60,000
Total	240,000
66,200 feet high-tension cable to three substations	45,678
49,500 feet low-tension cable	47,000
Conduit for cable	8,700
Manholes and covers, and labor for laying duct and pulling in cable	25,000
	126,378
Grand total	366,378

I would like to call your attention to the fact that any proposition to change the existing status, operation, or extension of the Capitol power plant should be considered with reference to the specific declarations of the act authorizing the construction of this plant, which will be found on page 31 of the sundry civil act (public No. 194) approved April 28, 1904. For your information I am attaching a copy of the document to this letter.

I would like to make a further suggestion that if Congress should decide to change the existing status, operation, or extension of the Capitol power plant that the functions of this office in any such work should be limited solely to the power plant proper within the limits of its building lines, and that all other operations be conducted solely by the proper authorities of the Treasury Department.

Very respectfully,

ELLIOTT WOODS,
Superintendent United States Capitol Building and Grounds.

[Act of Congress authorizing the construction, designation of purpose, etc., of the Capitol power plant, sundry civil bill, approved Apr. 28, 1904, Public 194.]

Toward the construction of a building for a heating, lighting and power plant in connection with the Office Building for the House of Representatives, the installation of necessary machinery, for labor and material, construction of ducts, heating mains, subways, and traction system connecting the Capitol Building, and for all other appliances and for each and every purpose in connection with all of the foregoing, $130,000: *Provided*, That said building for heating, lighting, and power plant, when constructed, shall be of sufficient size and capacity to furnish the necessary heat, light, and power for the Office Building of the House of Representatives, the Capitol Building, the Congressional Library Building, and for such other public buildings which may hereafter be erected on grounds adjacent to the Capitol Grounds at the east of the Capitol Building and facing the same.

That is the substance of the matter. Now, shall we proceed with the hearing without waiting for other members of the committee?

Senator NEWLANDS. I think so.

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The CHAIRMAN. The committee is at your service and is prepared to hear whichever one you desire to be heard first.

Senator NEWLANDS. I would suggest that Mr. Gilbert, who is a member of the Commission of Fine Arts, be heard first.

STATEMENT OF MR. CASS GILBERT, ARCHITECT, NEW YORK.

Mr. GILBERT. Mr. Chairman, this matter came before the Arts Commission very recently. It was referred, I think, about 10 days ago to the Fine Arts Commission by the Secretary of the Treasury under the usual line of action, and as the commission was not at that time in session, the matter was referred by the chairman of the commission to a subcommittee, of which I was chairman. The subcommittee had before it only the blue-prints which were offered by the Secretary of the Treasury. It came to me, I think, on the 21st of January. A meeting of the Commission of Fine Arts was held on Wednesday, the 26th of January. In that interim the subcommittee made an examination of the plans as submitted, and submitted a preliminary report to the Commission of Fine Arts, which is on file in the Commission. At the meeting of the commission which was held on Wednesday, the 26th, at the request of the commission, representatives of the supervising architect's office appeared and answered a good many questions which were asked by the commission. These questions are a matter of record, as they were taken down stenographically, and were directed to the general purpose of ascertaining whether such plant at that location could be made less objectionable in the landscape and still efficient, and while the Commission of Fine Arts does not, as I understand, undertake any engineering problems, in a technical sense it was apparently necessary to make some inquiry along engineering lines, in which we do not pretend to be experts, as to other methods of accomplishing the same result by the burning of other fuels and by the use of apparatus in substitution of smokestacks—that is to say, blower apparatus. Incidentally, some questions were asked as to the method of connecting from this plant to the more distant buildings, or to the other buildings, by means of tunnels and what provision has been made, and whether it was practicable to make a satisfactory connection which would be permanently suitable.

All of that inquiry appears in the records of the Commission of Fine Arts, and is available if you wish to see it.

The conclusion of the Commission of Fine Arts was that the plant at that location would be seriously objectionable, but having respect for the action of Congress, and deeming it not our function to establish a location, we could only express our great anxiety as to the result if a plant was located at that point. We could, however, within our function, as established by Congress, and as required by our presidential appointments, express our opinion as to the aspect of the plant, as to its appearance, and on that we were unanimous that it would be a seriously objectionable feature in the aspect of the city of Washington.

Beyond that I think there is nothing further for the Commission of Fine Arts to state, except that I will reecho the very grave feeling which we have that a power plant at that location would be seriously objectionable from the standpoint of appearance, and be-

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cause it would be visible from so many points of view. Coming up the Potomac River, it would be almost the first thing seen. It would be apparent from the War College and from all over the east Potomac Park, where Congress has recently directed the development of a considerable recreation area; it would be immediately visible from the proposed "long-since-past" bridge to Arlington, which has not yet been built, and which might perhaps be left out of consideration; it would be very noticeable from the Lincoln Memorial, the Mall, and from Arlington, from the terraces of the Capitol, and the whole west front of the Capitol.

We find that the width of the main roof varies slightly from 80 to 90 feet above the level of the street. The street is about 7 feet above the level of the water—that is, mean level of the water. The smokestacks are, as shown by the drawings, about 16 feet in diameter at the level of the roof. They rise to a height which, from a hasty scaling of the plan, indicate about, I think, 176 feet, but I believed it was stated by the representative of the Treasury Department that the total height of the stack would be 188 feet; but in either case, if 188 feet, that would be 195 feet above the river. Now the Washington Monument, I believe, is 555 feet high. At 195 feet these stacks would be a little more than one-third of the height of the Washington Monument, and as there are four of them, and especially as the location in relation to the railroad and the streets is slightly askew, with the main rectangular line of the street coming down to that point, and with its main axis along from the Capitol to the Monument, and from the White House to the river—these stacks would group themselves in diagonal form, which would present, from these principal points of view, the four instead of simply two, but the fact that there would be an evidence of four is not so important, because in varying points from which it would be seen that perspective would constantly keep changing.

We suggest the possibility of taking the stacks off altogether and using a forced draft. That, according to the response from Mr. Thompson, of the Treasury Department, would, I believe, give some additional expense in operation. It requires additional machinery, and, as I think he expressed it. "Where nature could provide the draft, why do it by mechanical means?" Nevertheless, the forced draft is not beyond possibility and beyond a more or less common practice. It would, however, in that case—am I right in taking so much time, Mr. Chairman? I do not want to be prolix.

The CHAIRMAN. You are perfectly right.

Mr. GILBERT. I am simply giving you some of the things that brought us to our conclusion or point of view. It would, however, probably cause the dissemination of gases to some extent. How far that would go, how far they would travel, or how far they would vitiate the air is a matter for scientists rather than for us and the department. We do not pretend to say.

As to the smoke, I venture to say the engineers would say to you as they have done in other cases to me in my professional relations with buildings—that it is largely a question of firing and of the form of the burning apparatus. In a modern plant, properly handled, there might be comparatively little smoke, but in nearly all plants—and as I look out over the city I see one down there

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now—there is a considerable volume of smoke. There is some smoke and certainly some gas. That is what the smokestack is for—to carry off these things.

Now, there arose the question as to why it should be erected at that point on the Washington Channel, having in mind that it was probably for the purpose of bringing coal in boats economically to the plant. We were informed by the engineer that while that might at some time become a feature of the plant, that no present provision was made for it. If coal is to be taken economically from barges or vessels, it is probable that you would require an overhead conveyor of some sort; otherwise it would be taken up in the good old-fashioned way by wheelbarrows and in some way transferred to the building. The present layout of the plant provides for the reception of coal from cars. It is dumped and carried to a crusher, then raised and put into the various hoppers or receivers, which convey it down to the boilers.

These questions came up because they had a more or less direct bearing on the height of the plant. It seemed to us probable that the plant could be lowered somewhat. The floor of the main building is about 20 feet above the street—I speak in round numbers and from a general knowledge of the plant. The answer to that is that at one time there was a flood which came some distance above the ground there—about 18 feet, I believe—and it was considered desirable to have the boiler plant above that level, and the precedent in other plants seemed to have established that as a reasonable principle. I think the engineer might have added that it also, as a mechanical proposition, to some extent relieves the boilers of their ashes and cinders, but that might be limited to a little lower level. However, if there was ever a flood, that height of tunnel system would be flooded and it would be difficult, probably impracticable, to force live steam through a flooded tunnel; it would condense too rapidly.

Another point in connection with the tunnel—and we had to make that inquiry—we found that the tunnel crosses the main sewer down on Fifteenth Street. The principal sewer, I understand, in Washington—I will say "we" understand, I do not want to make this as my statement at all—the principal sewer, we understand, is down Fifteenth Street, and necessarily would reach the White House; the Treasury Department; the State, War, and Navy Building; the Lincoln Memorial; the Navy Annex; the new Department of the Interior; the new Woman's Memorial Building below the American Republics, etc., and would have to cross from this side to the west side of Fifteenth Street. Hence, you must cross this sewer at some point. We were considering this question of possibly other locations. Our inquiry may have led us a little afield in the matter, but we are keenly anxious to help all we can. Then, at what point could there be a crossing, and what is the size of this tunnel? It is found that the size of the tunnel is about 6 feet or 6½ feet wide by about 7½ feet high—I speak from memory and I may be slightly wrong, but it is about those dimensions. Now, add the thickness of the bottom of the foundation or floor of the tunnel and the thickness of the overhead work and sides, then it would produce a tunnel, we will say, approximately 8 by 9½ feet in dimensions. It can not be readily deflected up and down. Huge pipes run through it; live steam will

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cause expansion. It is a difficult engineering problem. The tunnel must be waterproof—I mean from ordinary surface water. It is an expensive thing to construct a good tunnel, but where that tunnel crosses a sewer it must either go below the sewer or above the sewer or through the sewer. That is obvious.

Now, the depth below the sewer is such that it would be a very expensive operation to put it above the sewer. You have to consider the levels of the grades of the street and keep it below the street grades, and, incidentally, the connections that lead into the sewer alongside of it must intersect the line of this tunnel at some points, so that it becomes a complicated engineering problem and a very difficult one. I do not pretend to speak on behalf of the commission as to the relative merits of the methods by which this difficult problem has been solved, but in the inquiry made by the commission it was said that the piping for the tunnel passes through an iron encasement and crosses the top of the main sewer; and it was, I believe, estimated that it took about 15 per cent off the top of the sewer. Well, if the sewer is ample—much more than ample for its needs—that would probably do no harm, but if the sewer were flooded to its full capacity—and we are not informed as to that, and no question of sewer has been referred to our commission, so we did not go into that question—it would obviously be a check to the flow of water. However, it is highly probable that these skilled engineers have taken all of that into account.

This line of reasoning led us to the question as to whether it was really necessary for this plant to be down in that location. Now, given the supply of fuel by railroad, and eliminating the supply of fuel by water—which apparently is the present program, although in the future it may be changed at that location—might not the whole plant be lowered to a lower level, and might not these conditions be eliminated with forced draft? On inquiry as to this water location, we were told that the purpose of being near the water was to provide water for condensation for the turbines that drive the electric power plant. Well, there is not a large installation of power plant. The generating apparatus is not large but comparatively small; I have forgotten the statement of its capacity; but it is apparently not an important thing in the transmission of electric power. It is now so well established that it is not difficult to carry it any distance you wish. It seemed to us that as, apparently, this location was available or principally desired because it would be near the water for condensation purposes, that water might be supplied from any other location. We even went so far as to inquire whether a reservoir or tank might not be built, the same water being used over again, as in a cooling process, with some sort of aeration or cooling method, and with that added to the expense. No doubt it is a feasible solution of the problem, but as far as our inquiry went we felt we could not charge ourselves with the question of location—that had been settled by Congress—but that we could report that a plant at that location was, in the judgement of our commission—very undesirable from the standpoint of Washington, and we believed—although this may not appear in the report—that a more careful examination of the whole subject of a possible subdivision into two plants for the burning of oil or other fuel, or the burning of gas by a gas-producer plant or other method upon which the skilled engineers of to-day concentrate

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their attention—would bring about a better plant in a location that would be less objectionable.

Now, one word more and I shall have finished. Under the Executive order of the President matters of this kind are supposed to come before the Commission of Fine Arts before final action is taken. Through an inadvertence, apparently, this matter did not come to the Commission of Fine Arts. We had no knowledge of it, officially or otherwise, as far as I know, until about 10 days ago, after the contracts were signed. We make no complaint on that account, but on behalf of the commission I would like to register before your committee the view that the Commission of Fine Arts is not responsible for having passed upon the matter too late, nor could we pass upon it earlier.

I thank you, gentlemen, very much.

STATEMENT OF MR. GLENN BROWN, ARCHITECT, WASHINGTON, D. C.

Mr. BROWN. Mr. Chairman, I appear here representing a committee of Washington that is interested in the development of the city on esthetic lines solely.

Mr. Cass Gilbert has said so clearly what I wished to say that I will confine myself to a very limited number of words.

There is one point with respect to the disagreeable view of these stacks that he did not mention. When the White House was located by George Washington it was located with the idea of having a beautiful view down the Potomac—one of the most charming views that we have in this part of the country—and that was one of the vital reasons for locating the White House where it is. These stacks come up and directly cut off that view from the White House. I think this one fact is sufficient to justify the chimneys being kept down. We feel that this plan of a Federal city, which originated with George Washington and L'Enfant, was a great asset to the country, both financially and in the way of culture and refinement. The Government has spent since Washington's time to the present time approximately $100,000,000 on buildings and grounds. So far it has been harmonized, so that one element fits in with the other, and this will be the first great break in that scheme, and it should be most carefully considered before it is allowed. The value of this park scheme is an asset of the people, and it is an asset that has been wonderfully increased since the Park Commission presented their plans. Gen. Washington's scheme ended with the Washington Monument, which was then located on the shores of the Potomac, and the new reclaimed ground has made it necessary to add to the proposition and to carry the scheme much further. All has been done in harmony with the scheme of George Washington, and we feel that the people who are interested in Washington and Lincoln, and who are interested in the city all over the country, would feel that a great crime had been committed by erecting something here that would destroy the beauty of the city.

We have been studying the question of the advisability of locating it upon other sites, and we feel that it might be joined readily with the Capitol power plant, and if that was too great a run for steam pipes, that they might readily be——

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The CHAIRMAN. Not only an immense run for the steam pipes, but an immense run on the Treasury. Mr. Woods's report—in which he estimates; he does not pretend to be accurate at all—makes it nearly a million dollars.

Mr. BROWN. But we go right on spending nearly a million dollars in the other plant. We would save a million dollars.

The CHAIRMAN. How is that?

Mr. BROWN. The other plant would cost nearly $2,000,000—$1,500,000 complete, under present contract. It would cost $1,500,000 to get an acknowledged incomplete plant, on which you would have to add additional features to make it complete. That was to be a plant that would only do part of its work. It would be found inefficient and would have to be completed by additional appropriations.

Now, I am going to ask that the committee hear Mr. Hennen Jennings, who is present, a mining engineer of great eminence, who is also on the same committee and who is vice president of the Federation of Fine Arts, representing 200 art societies throughout the country, and these art societies have in their membership something like 300,000 people, all interested in the city of Washington from the standpoint of beauty. Mr. Jennings is fully capable of discussing the broader topics on the engineering side.

Mr. GILBERT. May I interrupt for just a moment in order to complete something that I omitted to say, which has just been called to my attention. It is in the act provided—

"That the building or buildings of said central heating, lighting, and power plant shall be so located upon said site as to reserve a sufficient area for an asphalt plant for the District of Columbia in the event of such asphalt plant being hereafter authorized.

In reading that act we feel still further apprehension because we are not familiar with what might happen as a result of an asphalt plant, and taking into account that the prevailing winds are said to be from south to southeast, what fumes, smoke, or gases may originate there we do not know, nor could we, in the short time we had, get sufficient information to justify an opinion on that subject.

I thank the committee very much.

STATEMENT OF MR. HENNEN JENNINGS, MINING ENGINEER, WASHINGTON, D. C.

Mr. JENNINGS. Mr. Chairman and gentlemen, my profession is that of mining engineer. I have had experience in this country and in South Africa, and therefore I can sympathize with the side of the engineers in their desire to get economy.

I came to this city about 10 years ago to take residence after being in South Africa, and I come here more as a citizen of Washington now than an engineer. Before I came here I had heard—I had not been in Washington, but I had heard in Europe of the wonderful possibilities, from many prominent people, of the development of Washington on the new plan that had been originated by a park commission. When I came here, my friends took me to the Library and showed me the plans, and it struck me as a wonderful thing in art possibility, and not only art possibility but also civic

pride of a Nation, which had something before it which had never been done, a possibility that no other country had. We had our great George Washington's scheme, the details of which were worked out by a French engineer—not all the things we plan for now, but the general idea. of an alignment with the great Mall which this park commission resurrected, the growth of which they outlined and showed to be perfect in attunement, and alinement of new structures was necessary.

As Mr. Brown has stated to you, there has been an immense amount of money already expended in the Mall area, which section of the Capital is a matter of patriotic pride and artistic satisfaction to the people. Now, do we want to put unnecessary industrial blots in the way of the development of the Capital City? As an engineer, I can sympathize with the engineers in their endeavors for economy. As a young engineer, 30 years ago, when my mind was all on engineering, I might have been very pronounced and very intolerant with artists and others, but as I am getting older I see there are other things besides engineering. When they have a problem like that before them engineers should compromise. I am not so sure, as an engineer, if that after all the power scheme is the most economical. I have not pretended to go into calculations. I believe, however, there are possibilities of making one station at the Capitol power station that exists now equal or superior in economy to that proposed, especially so if the Government Printing Office and Post Office Buildings are included and which are not taken into account in this scheme.

The CHAIRMAN. What is your opinion with respect to carrying the heat this distance?

Mr. JENNINGS. I mean taking in the Post Office and the Printing Office. If you have one central plant you could do the whole thing from one point.

The CHAIRMAN. I was talking about this plant where it is now situated in Garfield Park—how about carrying the heat from there?

Mr. JENNINGS. That would have to be all regenerated. As I understand—I have been visiting it—and just as a visitor I would say that it has surplus power. It has a site that is not obnoxious to anybody. It has already proved satisfactory, and to enlarge it, with the proper limitation and with the proper machinery, would not be a nuisance at all. There would be no objection to such a plant. Then as you put in greater units you do not have to have two separate plants. Under this plan there are two plants going all the time. The conducting of the steam to the farthest extent might not be very good practice, but these farthest points demand but small power. It might go a little beyond the most economical practice, but I believe the whole problem is worthy of reinvestigation. As an engineer I believe that it is worthy of reinvestigation, taking this whole problem and reinvestigating it again and consulting new people also.

Now, in the matter of some of the details connected with the lowering of these stacks that Mr. Gilbert has mentioned, I might state that one of the consulting engineers of the Bureau of Mines is here, and we have with us in this room their mechanical engineer and a gentleman also who is connected with the testing of fuels and other economies, and if it is desired to have further detailed informa-

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tion, which is more correct than mine as to possibilities, I do not think they could give you any reliable estimates in time; it is utterly impossible; but as to the possibilities of making a central station there, I think they could probably speak to you with more enlightenment than I could.

It is a very large question; it is a big, broad question. I do not see the necessity of such great haste. The matter might be reconsidered. In any event, if it is necessary to keep that site, there should be a modification of these stacks. I know, as an engineer, that there is some economy in natural draft. I do not doubt that. But it is not so great. You have flexibility in your firing by this draft which can, I think, prevent the outlet of smoke better than by natural draft. Of course, you would have to have a duplicate plant—a plant with a duplicate chimney, especially if you only had one stack. One of the objections to forced draft is the uncertainty of your machinery; it may get out of order. That can be obviated by duplication, which is being done by present practice here.

I have been told, and I believe it is true, that here [indicating] would be a good center of the distribution of the heat, and that is quite true for the buildings included. But what is the loss of a little farther distance to the main centers, taking the whole aspect to the Nation and the patriotic sentiment and pride of the people? I would ask, Mr. Chairman, that this matter have further consideration.

I thank the committee, and will say that if you desire to hear any gentlemen from the Bureau of Mines they will be glad to appear.

(Mr. Jennings was thereupon excused.)

STATEMENT OF LEWIS B. STILLWELL, CONSULTING ENGINEER, NEW YORK.

Mr. STILLWELL. Mr. Chairman, I have come down here at the request of Senator Newlands, but I do not know exactly what he expects me to say. I am ready to answer any questions what may be asked me.

Senator NEWLANDS. I will state, by way of preliminary, that Mr. Stillwell was consulted in some way with reference to this plan. He is an eminent mechanical engineer in New York, and I learned from Mr. Gilbert that he had been consulted with reference to these plans, and I thought it would be advisable to have him here. So I caused him to be summoned by the committee. When he came he expressed some delicacy with respect to appearing, because he regarded himself as a client of Mr. McAdoo, who had, on behalf of the Government, enlisted his services, and he did not know how far he ought to go, and particularly he did not wish to volunteer anything.

The CHAIRMAN. I think the suggestion, under the circumstances, is a very good one. Suppose you ask him any questions you desire to ask.

Senator NEWLANDS. I communicated with Mr. McAdoo over the telephone and told him of Mr. Stillwell's delicacy on the subject, and he told me that, of course, Mr. Stillwell was representing the Government, or was employed by the Government, and was at liberty to present his views regarding the subject. I would therefore simply suggest, Mr. Stillwell, that in your own way you go on and state your

views regarding the site, regarding the plant itself, the height of the chimneys, their appearance in the landscape, etc., any anything else that suggests itself to you that will be of public interest.

Mr. STILLWELL. That clears the situation, so far as I am concerned, very satisfactorily.

I should like to say at the outset that my firm has, in this matter, assumed no responsibility in regard to the selection of a site. We have been told that that matter was settled before we were called in; that the plant was to be located at a certain point. Our function has been limited to this: That my firm has supplied a number of expert mechanical and electrical designers who have been placed temporarily on the rolls of the Supervising Architect's Office to make the plans for the mechanical and electrical equipment and for the power house in so far as its structure is directly related to that equipment. For the architectural merits or demerits of that power house we assume no responsibility. That has been in the hands of the Supervising Architect and his representatives.

As to the site, expressing my personal opinion of the matter—and I am glad to have an opportunity to do so—I think this whole matter has been approached here in a way that could not be expected to attain the best economical results. For instance, one of the first things that suggested itself to us when we came here was why build a new plant? Why not extend the existing plant? Of course, the present plant is farther away from the buildings which are to be heated, and it is possible that were we to figure out the losses in transmitting the steam, we might reach the conclusion that it was unwise to transmit it so far. That problem, so far as I know, has never been investigated. It certainly has not been by my associates or myself.

Another question that I asked soon after I came here was this: How is this plant correlated with the possible utilization of the Great Falls of the Potomac, in regard to which Mr. Clemens Herschell made a report for the War Department a year or two ago? And my impression is that up to this time there has been no attempt to consider broadly whether the Great Falls of the Potomac in cooperation with the steam plant here, or otherwise, could be utilized to advantage in the city of Washington. I make this statement because I want to say that, as an engineer, I think this problem should be studied on broad lines—on lines as broad as those which have been applied by the Arts Commission in its work—and that the whole problem of the supply of electricity for lighting and power purposes and of heating from central stations—if that be the best way—should be laid out now on a plan which can be substantially adhered to for the next 50 or 100 years. The development ought to be systematic and symmetrical in respect of power supply as in respect of architectural development.

Now, as to the plant that has been contracted for, the department has found it necessary to omit a considerable amount of apparatus from its specifications as they were approved by my associate, Mr. Putnam, who represented me here. Unless those omissions are replaced in the near future the plant, in my judgment, would be better left unbuilt. It is presumably the intention of the department to make this replacement in whole or in part so as to make the plant an operative plant.

The CHAIRMAN. They cut it out, I suppose, on account of lack of appropriation.

Mr. STILLWELL. Lack of appropriation, but in doing that there were some highly objectionable changes introduced. For instance, under the contract as let, one of the duplicate steam pipes which were called for by the specifications, will be omitted. Obviously, if you are going to depend upon steam transmitted a distance of nearly 2 miles for the heating of public buildings, you must have a reserve or relay steam pipe to be utilized in case the one normally used goes out of business. Now, in order to omit that auxiliary steam pipe, it becomes necessary for the department to abandon another feature of the plans and specifications as they were drafted by my firm; namely, to give us the idea of taking the boiler plants gradually out of these buildings—the boiler plants of the existing isolated plants; because it becomes necessary to keep them there to fall back on in emergency. That imposes very considerable difficulties in respect of finding a place for the electrical apparatus that is to go in. They have now to put them in the engine rooms; and my men who have been here, and who have looked over the ground, have told me that it can not be properly done. Personally, I have not looked into the matter. But if the opportunity is afforded to hold up this work until the whole subject could be reviewed in a broad way and solved, as it would be solved in the case of a private corporation undertaking a proposition of similar magnitude, I am not at all sure that there is any engineering necessity for locating the plant at the point selected. I do not wish to say that that is not the point at which the lowest cost of producing the electric unit and steam unit for distribution can be accomplished, but there are many ways of accomplishing a result. That is what an engineer is for. If there is objection to one way the engineer is supposed to find another way of doing it, and I feel perfect confidence, from the general situation, that it could be done.

I have been told that for some reason it was impossible to consider the extension of the existing plant. On the face of it that is the obvious thing to do, and if you are going to leave the present steam plants in the buildings, unless they are causing enough smoke to be a decided nuisance, you can get along very well by supplying the electricity from the present plant with a slight addition to it, as Mr. Woods has said, I believe. When it comes to steam heat from that point, I should not want to express an opinion without going into the matter.

As to the questions of detail that have been under discussion, I do not know that it is necessary for me to discuss them but, with regard to the elimination of the stacks, if the plant is to be left at the location selected, the stacks can be removed, and induced draft used satisfactorily, I believe. The height of the building could be further reduced, quite materially, by substituting oil for coal as fuel. I have made no figures on the difference of cost, but that could be done.

Mr. GILBERT. Mr. Chairman, may I ask a question?

The CHAIRMAN. Certainly.

Mr. GILBERT. How would it be about gases if the stacks are lowered?

Mr. STILLWELL. There undoubtedly would be hot gases thrown out from the building. You would naturally throw them toward the river, but where they might drift would depend upon the direction of the wind.

The CHAIRMAN. The winds here are nearly all the time from the south, a bit east.

Mr. STILLWELL. At the present time there appears to be no public building near enough to be troubled. What may come up in the future, I do not know.

The CHAIRMAN. There will be another building there after awhile.

Senator NEWLANDS. How about foliage?

Mr. STILLWELL. I should not think there would be enough gas to affect the foliage if the plant is put in well.

Mr. JENNINGS. I asked that question of an engineer in the Bureau of Mines, and he did not consider that the gases would be a great detriment at that height; that they could be used without serious injury with forced draft.

Mr. STILLWELL. You mean with the stacks eliminated?

Mr. JENNINGS. Yes.

Mr. STILLWELL. And forced draft substituted.

The CHAIRMAN. If you throw out gases to any great extent, you would do a great deal of damage to the landscape in every way.

Mr. STILLWELL. Yes. Personally I did not realize when my men were working on this plan that it was located within the zone, or so near the zone, of the proposed improvements. I had the general impression that it was down by the river and along the railroad, or near the railroad, where they were going to have an asphalt plant, etc., and that did not sound as if it would be objectionable. So I really overlooked then the esthetic point of view entirely. In fact, I was here only a few times, and was supervising it only in a general way. I think your difficulty can be solved provided the problem is studied in a broad and open-minded way, and undoubtedly there can be a satisfactory solution that will eliminate this objection that has been raised.

The CHAIRMAN. Are you through with your statement?

Mr. STILLWELL. Unless some gentleman has a question to ask.

The CHAIRMAN. I do not want to take you off your feet.

Senator NEWLANDS. Mr. Gilbert, is there any question that you desire to suggest?

Mr. GILBERT. No; it seems to me that Mr. Stillwell has covered the points thoroughly.

Senator NEWLANDS. Would you regard that site, with reference to the Mall and the general architectural and landscape development there, as objectionable?

Mr. STILLWELL. You are asking me now as a citizen of the United States?

Senator NEWLANDS. Yes.

Mr. STILLWELL. I would not have the plant there, Senator. I would place it somewhere else.

Assistant Secretary NEWTON. May I ask a question?

The CHAIRMAN. Certainly.

Assistant Secretary NEWTON. Mr. Stillwell, do you not think it is rather unfortunate that you did not discover that at the time you

were considering the matter, and when you were being paid by the Government to handle it?

Mr. STILLWELL. I was paid by the Government to do certain specific things, and one of the things I was particularly told that I need not touch was the question of site. So we did not consider that, Mr. Newton.

Assistant Secretary NEWTON. You made no objection to it whatever?

Mr. STILLWELL. I did not.

The CHAIRMAN. As an engineer, you do not object now, do you?

Mr. STILLWELL. No, not as an engineer. I did ask the supervising architect at one time in regard to whether the plant from a certain point of view would be objectionable—whether the thing would be objected to—and my recollection is his answer was that he thought it would not be. Since I heard of this two or three days ago, I asked my man who was here, Mr. Sidman, about it, and he said he had also asked the question, and understood, I think from your consulting architect, that that was a thing that we were not concerned with. I think, Mr. Newton, I recall raising the question very early in the day as to why we did not extend the other plant at the Capitol—either with you or some of your people.

Assistant Secretary NEWTON. I do not recall it.

Mr. STILLWELL. I do, distinctly.

Senator NEWLANDS. What was that?

Mr. STILLWELL. That we raised the question with some gentlemen at the department. I do not recall who, as to why the existing plant could not be extended, and I was told that somebody or some group of people who were interested in the plant at the Capitol would not listen to any use of that plant for purposes other than lighting and the supply of heat to the Capitol Building, and to the two office buildings and the Library; that their fear was if it was tied up with any extension their service would be interrupted. That was my understanding.

Mr. JENNINGS. You would not have any fear of such interruption, would you, any more than in any other plant?

Mr. STILLWELL. No; many of the very large cities are supplied from one large central station. That is the general method.

Mr. JENNINGS. Are you still of the opinion that the proper plant from this point could not be finally completed at a cost under $2,000,000?

Mr. STILLWELL. The lowest lump-sum bid for what my firm considered a proper plant was just under $1,700,000—$1,698,000, I think. We had made an estimate which came to $2,000,000. We were then requested to make the complete plans and specifications, scaling down where we could, and we did that, and Mr. Putnam tells me that while he submitted no revised estimates before the bids were asked, he expected a bid of about $1,850,000. They got a lower bid than that, $150,000 under our anticipation, but the cost carried out in accordance with the plans and specifications which were supervised by Mr. Putnam and Mr. Sidman of my firm, and I think in consultation with Mr. Thompson, will be about $1,700,000.

Senator NEWLANDS. Are there any further questions?

The CHAIRMAN. I have nothing further to ask.

Mr. STILLWELL. I am glad I have had this opportunity to state my position.

Mr. Stillwell was thereupon excused.

The CHAIRMAN. Mr. Newton, you asked a question a moment ago, and I think maybe we had better hear you in this connection.

STATEMENT OF HON. BYRON R. NEWTON, ASSISTANT SECRETARY OF THE TREASURY.

Assistant Secretary NEWTON. Mr. Chairman, I want to express the regret of the Secretary that he could not be here. We received notice of this hearing only a very few minutes before it was called, and I had no knowledge what direction your inquiry would take under this joint resolution, which I understand has not been adopted.

I think it is fitting that I should, as representing the Treasury Department, run over briefly the history of this enterprise, and I will be very brief.

The CHAIRMAN. One word before you get into that. Do you know how it came about that the Fine Arts Commission was not consulted about the plant and the heating and lighting?

Assistant Secretary NEWTON. Yes, sir.

The CHAIRMAN. Bring that out in your statement somewhere.

Assistant Secretary NEWTON. I will come to that in due course.

When the present Secretary of the Treasury came into office he discovered that there was lying dormant this project for the central heating, lighting, and power plant. We breathed life into it. It was a direct authorization from Congress to do this thing. My understanding of its origin and its development and progress is about this: First, it was deemed advisable for the best interests of the Government to have such a central plant to provide the service for the public buildings existing and those to be added. The matter was surveyed from all sides and finally a committee was appointed consisting of a representative from the Supervising Architect's office, the chief engineer of one of the other services, the Coast Guard, and a gentleman, I believe, from the Bureau of Engraving and Printing. They looked over the situation. The first thing they discovered was, of course, that there were certain smokestacks that at that time and for some time prior, and I believe even to-day, had outraged the esthetic sense of Washington. I think the chief offender is the one that Mr. Gilbert just referred to, the Potomac Power Co. stacks, which stand here in the heart of the city. I believe there have been great outcries against the nuisance, but the Fine Arts Commission, as I understand it, had no control of that and has no control over it.

Now, of course, naturally the next question arose as to the location of the power building itself where it would be the least offensive, or as little offensive and objectionable as possible, and the natural location seemed to be the very spot where it is located now. This information was collected. It was laid before Congress and Congress passed an act, the sundry civil bill of 1913–14, directing the Secretary of the Treasury to erect this building within an appropriation approximating $1,500,000. There was a provision in that act which appropriated $35,000 for the employment of technical service on a salary basis in the architect's office to aid the Supervising Architect in making the plans for this style and type of project. The Super-

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vising Architect's office, as you understand, is engaged more generally in plans for smaller buildings—post offices and Federal buildings.

Acting under that direction we sought for suggestions and plans from several of the leading engineering concerns of the country familiar with that style of work—power-plant work. Mr. Stillwell's company was finally selected and Mr. Stillwell was employed up to the extent of the appropriation. Mr. Stillwell desired to go on with the work and have charge of the supervision of this plant, but it was impossible because of the limitation of the appropriation to give him that work. Therefore his connection with the enterprise ceased at the time the contract was finally awarded.

Mr. Stillwell's engineers aided us in making the plans and specifications for the plant. Then bids were taken; they were all over the appropriation. By certain omissions, without changing the form of the specifications, and without interference with the competitive system under which we work and to which we adhere most rigorously, it was possible to let a contract. That contract was let on the 24th day of December and work began immediately on the excavation. The only objection that was ever made to this power plant, to the building itself, was that the plan as drawn by Mr. Stillwell's men would make it too ornate, too ornamental. We thought it would be possible, probably, to change that somewhat, simplify somewhat, and thereby save some money. The objection was made that it was inharmonious with the surroundings; it was like a diamond in a dirty shirt front. It was down there on the river front where it could be most conveniently located of course for getting water and removing ashes, and removing the smoke as far from the center of the city, from the places where the other nuisances now exist, as possible.

There was objection made. There was some criticism made of this plan before the contract was let by the Potomac Power Co. There was objection made after the contract was let by the Potomac Power Co. The Potomac Power Co. made the suggestion to us that we come to Congress and ask for the repeal of the legislation. We did not feel that we ought to do that because they were unable to make to the Treasury Department any offer that would justify us in doing it. Therefore the contract was let, the Secretary of the Treasury believing it to be for the best interests of the Government now and hereafter, and that is why the contract was let.

Now, as to the Fine Arts Commission, there is this explanation: I did not know until the secretary of that commission called on the department that this plan had not been submitted. I knew there had been informal discussion with some members of the Fine Arts Commission months ago, as there had been with Army engineers about the location of the power plant. It came about in this way: The Supervising Architect retired from service last April; he resigned. Prior to that time, from the inception of this matter up to his retirement, he had handled the matter personally. The records he kept in his private desk, and nobody knew what steps were being taken. After his retirement the matter had been very largely turned over to special men, to Mr. Stillwell's men and others, and they carried it along right up to the time of receiving the bids and awarding the contract.

So that explains that phase of it. I do not know that there is anything further that I have to say. I would like to say that there are

some engineering matters that have been brought up here that possibly the Supervising Architect, or the mechanical engineer, Mr. Thompson, would like to answer, particularly Mr. Thompson, with reference to the statement Mr. Stillwell made about the omission of the duplicate steam line.

The CHAIRMAN. I do not think that the question about the omission is important.

Senator NEWLANDS. Mr. Newton, was the matter submitted to the Arts Commission before or after the contract was let?

Assistant Secretary NEWTON. After the contract was let.

Senator NEWLANDS. What is the requirement of law, or the Executive order, with reference to submitting it to the Fine Arts Commission?

Assistant Secretary NEWTON. I think the requirement of the Executive order is that plans for all public buildings within the District of Columbia shall be submitted to the Fine Arts Commission for their comments and advice.

Senator NEWLANDS. That is an Executive order?

Assistant Secretary NEWTON. Yes, sir.

Mr. GILBERT. May I, for the purpose of a better understanding, say to the Assistant Secretary that there is no question in the minds of the Commission of Fine Arts as to the jurisdiction or any point of that sort.

The CHAIRMAN. I understand that.

Mr. GILBERT. I believe that as soon as the matter was called to Assistant Secretary Newton's attention he immediately took action to cover the point.

The CHAIRMAN. We understand that there is no unfriendly feeling on their part. I just wanted to know myself, as a legislator, why the law had not been complied with, and I think the explanation is very satisfactory. The man who ought to have done it did not do it; he went out and nobody knew whether he had or not.

Senator NEWLANDS. Perhaps it would be well to read into the record at this point the Executive order, dated October 25, 1910. The President directed that—

> Plans for no public buildings to be erected in the District of Columbia for the General Government shall be hereafter finally approved by the officer duly authorized until after such officer shall have submitted the plans to the Commission of Fine Arts, created under the act of Congress of May 17, 1910, for its comment and advice.

The act of Congress directs that—

> It shall be the duty of the commission to advise upon the location of statues, fountains, and monuments in the public squares, streets, and parks in the District of Columbia, and upon the selection of models for statues, fountains, and monuments erected under the authority of the United States and upon the selection of the artists for the execution of same. It shall be the duty of the officer charged by law to determine such questions in each case to call for such advice. The foregoing provisions of this act shall not apply to the Capitol Building of the United States and the building of the Library of Congress. The commission shall also advise generally upon questions of art when required to do so by the President, or by any committee of either House of Congress.

There is another Executive order of November 28, 1913, as follows:

> It is hereby ordered that whenever new structures are to be erected in the District of Columbia, under the direction of the Federal Government, which affect in any important way the appearance of the city, or whenever questions

involving matters of art, and with which the Federal Government is concerned, are to be determined, final action shall not be taken until such plans and questions have been submitted to the Commission of Fine Arts designated under the act of Congress of May 17, 1910, for comment and advice.

Mr. STILLWELL. May I say just one word with reference to the remarks of Mr. Newton as to the effect of the plan which my firm had approved. It was criticized as being "too ornate." I think there is nothing ornate in this plan, but, if there is, we did not put it there. As a matter of fact, the architectural features of the building were not directed by us. They were directed by the architects of the Supervising Architect's Office. But I should not call it ornate.

Assistant Secretary NEWTON. But I understand you did the engineering suggestions with regard to the plant—power and light?

Mr. STILLWELL. We did the full plans for the mechanical and electrical equipment and steel structure—not the ornamental part.

Senator NEWLANDS. Mr. Newton, I want to ask regarding the possibility of staying the progress of this work while this investigation is going on.

Assistant Secretary NEWTON. The contract was let and a definite time fixed for completion, within which the contractor must complete his work. I am not a lawyer, but I assume if the work is interrupted the contractor would claim damages.

Senator NEWLANDS. Undoubtedly; if he is put to any injury he would have to be recompensed.

Assistant Secretary NEWTON. Yes, sir.

Senator NEWLANDS. As I understand, the excavation is going on now.

Assistant Secretary NEWTON. Yes, sir.

Senator NEWLANDS. Could he not suspend that excavation for the time being?

Assistant Secretary NEWTON. Well, I suppose he would have to if you gave him the order.

Senator NEWLANDS. That is, give him an extension of time for as many days as he has suspended the work.

Assistant Secretary NEWTON. Yes, sir; if he is so directed by Congress, of course he would do so, or if we are directed by Congress to direct him to.

Senator NEWLANDS. And could it not be done in an amicable way upon your suggestion?

Assistant Secretary NEWTON. I am inclined to think the Secretary would be reluctant to do any such thing, unless he had the very best reasons for doing it. Of course, I can not speak for the Secretary.

Senator NEWLANDS. It takes more or less time for the action of Congress upon a matter of this kind, and, pending the action of Congress, if you could arrive at some friendly understanding with the contractor that the work should be suspended I think it would be very desirable.

Assistant Secretary NEWTON. That is a matter I would have to consult the Secretary about.

The CHAIRMAN. The committee will now adjourn until to-morrow morning.

(Accordingly, at 6 o'clock p. m., the committee adjourned until to-morrow, February 4, 1916, at 10.30 o'clock a. m.)

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CENTRAL HEATING, LIGHTING, AND POWER PLANT IN THE MALL.

FRIDAY, FEBRUARY 4, 1916.

UNITED STATES SENATE,
COMMITTEE ON THE LIBRARY,
Washington, D. C.

The committee met at 10.30 o'clock a. m. pursuant to adjournment, for the purpose of resuming the consideration of the resolution S. J. Res. 92, relative to the construction on the site selected the central heating, lighting, and power plant authorized by the provisions of the sundry civil appropriation act approved June 23, 1913.

Present: Senators Williams (chairman) and Newlands.

The CHAIRMAN. Mr. Newton, we will hear you next.

ADDITIONAL STATEMENT OF BYRON R. NEWTON, ASSISTANT SECRETARY OF THE TREASURY.

Assistant Secretary NEWTON. Mr. Chairman, upon what particular lines do you wish me to speak.

The CHAIRMAN. I will tell you one thing I would like to get some definite information upon, and that is how soon would this plant have to be finished in order to meet the necessities of the case down there.

Assistant Secretary NEWTON. The contract limit——

The CHAIRMAN. No; I did not ask about the contract.

Assistant Secretary NEWTON. Well, I hardly know how to answer that question.

The CHAIRMAN. When will the buildings that it is to heat be filled with employees?

Assistant Secretary NEWTON. Well, they are filled now. Most of them have been for a long time.

The CHAIRMAN. Have they their separate plants now, each one of them?

Assistant Secretary NEWTON. Yes, sir.

The CHAIRMAN. None of them is without it?

Assistant Secretary NEWTON. No, sir; there is none without the heat and light. Of course there are new buildings. There is the Interior Department building which is now being constructed——

The CHAIRMAN. How long will it be before it is ready to receive heat and light?

Assistant Secretary NEWTON. December 31, 1916—that is, to be finished under the contract period.

The CHAIRMAN. Are you going to discard these separate powers as soon as they get the central power?

Assistant Secretary NEWTON. I believe to some extent—you mean the machinery inside?

The CHAIRMAN. Yes.

Assistant Secretary NEWTON. I would prefer that you ask the engineer or the Supervising Architect, who is familiar with the details of the matter.

The CHAIRMAN. We learn here in Congress when we give the department this, that, or the other thing, they keep the old ones all the same. For example, we put up a million-dollar Agricultural Department to keep them from running all over town, and they are running just as much as they ever did. That is the case with all of them. If we provide a central plant and are not to have an economical compensation for it I do not see the use of the plant myself. Congress has decided upon that plant. In addition to the buildings now existing, and filled with employees, is the Interior Department the only one that will soon come into operation?

Assistant Secretary NEWTON. No, sir; there is the Lincoln Memorial, the Woman's Memorial, the Red Cross Building; that will soon be completed, as I understand it. Then there are other buildings contemplated, such as the Department of Justice, the new Department of Commerce——

The CHAIRMAN. They are not finished yet, any of them, are they?

Assistant Secretary NEWTON. No, sir; except the Interior Building.

The CHAIRMAN. How long do you think it would be before the Lincoln Memorial would need heating and lighting; have you any idea?

Assistant Secretary NEWTON. I do not know just the contract period. I know it is nearly erected, the structure.

Col. HARTS. It is supposed to be March, 1918.

The CHAIRMAN. Now, as far as the old buildings are concerned, there is no particular hurry, because under the separate plan, as far as I can catch it, the only thing is in case of emergency in the new building for the Interior Department.

Assistant Secretary NEWTON. I do not know that that would be considered as enumerated in the category of emergency any more than others.

The CHAIRMAN. If it is finished by August 31 of this year, it will have to have an independent light or use the central plant?

Mr. WETMORE. That building is being constructed with a heating plant.

The CHAIRMAN. If this is to be supplied to it, why should it be constructed?

Mr. WETMORE. Some have heating and some have heating electric generating plants—the buildings that are intended to be taken care of by this plant under the original legislation. All have their heating plant in and some have electric generating plants. The new Interior Department building is being built with a heating plant, but no generating plant.

The CHAIRMAN. And some get supplied by the Potomac Power Co.?

Mr. WETMORE. Some from the Potomac and some manufacture it themselves. This plant was not authorized because of an emergency. It was authorized because of commercial savings that could be made.

The CHAIRMAN. I understand that, but there will be no commercial

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saving if the Government is going on erecting a new building like the new Department of the Interior. In the new building there will be no saving.

Mr. WETMORE. But this is merely a plant not intended to be operated except in the case of emergency.

The CHAIRMAN. If the central heating and power plant is constructed, it will be constructed with duplicate arrangements of every description, so that if one part fails the other part can operate, can it not?

Mr. WETMORE. Certainly.

The CHAIRMAN. Then why should you have a triplicate arrangement in the shape of separate powers in the separate buildings?

Mr. WETMORE. I might answer that by saying that that is the very thing that was done here at the Capitol. There was a power plant constructed to take care of the Capitol buildings, and the boilers are, some of them, in this building yet.

The CHAIRMAN. I suppose that is because they were here, and it was found that it would be as expensive to scrap them as to get new ones.

Mr. WETMORE. Yes, sir.

Senator CUMMINS. Mr. Chairman, I just arrived in the room and would like to inquire what the hearing is about?

The CHAIRMAN. I will state there has been a multitude of protests brought against the erection of this central power, heating, and lighting plant down in the Mall. It is supposed to have great stacks running up a hundred and some odd feet from the river level and from the street level, that will deface the view of the landscape and spoil the esthetics of the situation. The Art Commission was accidently not consulted as it ought to have been under the law, but it seems that the Supervising Architect was supposed to have done that, but he did not—that is, the former Supervising Architect. He went out and the new man supposed it had been done, so it never was done at all. The law was unwittingly violated. When the Art Commission heard of it they made a protest, and some protest has come from some civic bodies in Washington, and Mr. Newlands suggested to me that we have a hearing on the subject.

Senator CUMMINS. The appropriation did not fix the location at all?

Mr. WETMORE. Yes, sir.

The CHAIRMAN. It did?

Mr. WETMORE. Yes, sir.

The CHAIRMAN. I did not know that.

Mr. WETMORE. Congress fixed the location in the bill. The Treasury Department had no option as to whether it would build this plant at this particular point or some other point. The law itself fixed the location of this building on this particular site.

Senator CUMMINS. Has anything been done in the way of construction?

Mr. WETMORE. The contract has been let; it was let on the 24th of December, and the excavation merely has been commenced, as I understand it.

The CHAIRMAN. There are two cardinal points involved in the matter, in addition to the question of art; one is how far the Government could prevail upon these contractors to modify their con-

tract and extend the time, if it was thought necessary, and the next is how this law of Congress is to be carried out. After these hearings are completed they will be laid before the two Appropriations Committees. I may say that I noticed in the paper this morning that Mr. Fitzgerald has been receiving a great many protests in the House. All of this matter will have to go to the two respective Appropriations Committees, and they will have to modify the law or do something else. Prior to that probably the Treasury Department will have to see its contractors and see whether they can agree upon a modification of the contract entered into, but, of course, the Appropriation Committees will look into that as well as the Treasury Department.

Mr. Newton, do you care to be heard further?

Assistant Secretary NEWTON. Mr. Chairman, I said yesterday all that I care to say at this time.

The CHAIRMAN. Then we will hear Mr. Wetmore.

STATEMENT OF JAMES A. WETMORE, ACTING SUPERVISING ARCHITECT, TREASURY DEPARTMENT.

Mr. WETMORE. Mr. Chairman and gentlemen, I would prefer, if agreeable to the committee, to say what I have to say after these gentlemen who are here in opposition to the building of this power plant have been heard. It seems to me that that would be the more orderly procedure.

The CHAIRMAN. I think it would be well for you to take the opening and closing, both, so as to disclose your case to them, and then let them disclose their case to you.

Mr. WETMORE. I have no objection, Mr. Chairman. We have nothing to defend that I know of. The legislation in this case——

The CHAIRMAN. In the first place, your position is what?

Mr. WETMORE. I am the Acting Supervising Architect of the Treasury Department. The construction of the Capitol power plant probably suggested the construction of a central power plant. The success that came from the operation of the Capitol power plant suggested, probably, to the members of the House Committee on Appropriations the desirability of having a central power plant. Certainly the thought with respect to this matter originated in that committee, as I understand it, and they commenced in that committee an investigation as to the possibility or feasibility of the erection of a central plant that would furnish heat, light, and power to the buildings named in the original act at a price that would justify the construction of such a building.

Senator CUMMINS. What were those buildings?

Mr. WETMORE. I do not know that I can enumerate all of them, but they consist of, as I recall, the old post-office building on Pennsylvania Avenue at Twelfth Street, the Fish Commission Building, the Army Medical Museum, the buildings of the old and new Smithsonian Institution, the new National Museum, the buildings of the Department of Agriculture, and the Bureau of Engraving and Printing, old and new—the old building being now used as the auditors' building—the Monument, the Treasury, the White House and its grounds, the State, War, and Navy Building, Winder Building, Court of Claims Building, Municipal Building, and, I think, the

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Mills Building. I believe that is all. Those are all buildings that are in existence. Then, in addition, the act requires that the plant should be of sufficient capacity to furnish heat, light, and power for the contemplated buildings of the Departments of Justice, Commerce, and Labor, and that it should also provide for a cross section between the proposed plant and the Capitol power plant for the purpose of furnishing electricity in case of a breakdown in either plant. That last proposition is not heat; that is electricity alone.

Senator CUMMINS. That takes in everything, practically, except the Interior Building?

Mr. WETMORE. Yes, sir.

Senator NEWLANDS. You mean the present Interior Building?

Senator CUMMINS. Yes; all the Government buildings west of the present office and including the present post office.

Mr. WETMORE. Yes, sir; now, in addition to that, our department and office has recommended in connection with the construction of this plant, it include also the Department of the Interior Office Building, the Memorial Building of the Women—the Red Cross Building as it is sometimes called—the Johnson-Walker Building, which is a building completed and occupied—a privately owned building occupied by the Government.

Senator NEWLANDS. By what department?

Mr. WETMORE. The Navy Department; and the Lincoln Memorial.

Senator NEWLANDS. Does it include the Pension Building?

Senator CUMMINS. That is the Interior Building.

Mr. WETMORE. No, sir; it does not include any buildings east of the post office. It is not the Interior Building, Senator Cummins, on Seventh Street. It is the new Interior Department office building between Eighteenth and Nineteenth between F and G Streets NW. Hearings were had by the House Appropriations Committee, this matter not having originated in the Public Buildings and Grounds Committee of either House; it originated in the House Committee on Appropriations. They held lengthy hearings there in regard to the proper location of a site for a plant of this kind, and the cost of construction of such a plant. The hearings were for the purpose of learning whether heat, light, and power could be supplied from a central power plant to the buildings which I have named at a saving compared with the present method of producing in those buildings heat, light, and power from their own plants, and purchasing electric current for those buildings which have no electric generating plants. All the buildings have heating plants.

This matter, of course, is one that was handled before I had temporary charge of the office, so that my information is not as definite as is that of the engineer, who is here, from our office. But this particular site was designated by the gentlemen in Congress, who gave particular attention to this matter after long and exhaustive hearings, and it was their purpose not only to use this site, but to put on this site a building of a good deal less architectural pretension than the building we have designed. The thought that was in the minds of the Appropriations Committee apparently was that we should duplicate the Capitol power plant. That is practically what we are doing, but the architectual features of the building itself, that is now under contract, are very much of an improvement on the

Capitol power plant. That the Committee on Appropriations had in mind something that would be a commercial type of plant is evident because what they wanted was something that would operate at a saving. The saving that we are estimating making with this plant as against present conditions—the manufacturing of current, light, and power in the buildings that are equipped for that purpose, and buying the current in other buildings is $177,000 a year, after capitalizing the plant and taking into consideration all necessary repairs, wear, and tear, and all that sort of thing, on the basis that the Bureau of Standards lays down as the way to figure whether an investment of this character is profitable or otherwise. The additional buildings that we have suggested will indicate a further saving of about $40,000 a year. Now, it is probably proper to say——

Senator NEWLANDS. I did not catch the first statement you made as to the saving.

Mr. WETMORE. I said $177,000.

Senator NEWLANDS. Is that in all.

Mr. WETMORE. That is in all of the buildings named in the act. Now that means, of course, the operation of this plant and the ceasing of operation of the plants in the other buildings.

Senator CUMMINS. May I ask you a question?

Mr. WETMORE. Certainly.

Senator CUMMINS. The question is not whether a plant of this sort should be built, but whether it should be built here; that is the question, is it not?

Mr. WETMORE. Well, Senator, this hearing seems to have taken a peculiar turn. Yesterday they were criticizing the placing of this plant on this site, and questioning the propriety of building any plant.

The CHAIRMAN. I will allow the inquiry to cover the whole ground. There is another question also involved. There is a letter here from Mr. Elliott Woods, to which your attention will be called later, Senator Cummins, as to whether or not the present Capitol central plant could be made to do all the work, and we thought we would just cover the whole ground while we were about it, in order to give Congress full information.

Mr. WETMORE. There is a good deal of misinformation abroad concerning this plant. Gentlemen have apparently made statements in the papers—and I do not know but what I may say in the hearings—without careful study of the situation. I do not know that I ought to say anything about the A B and C's of engineering that indicate the propriety of the use of this particular site, but if I may mention one or two items that apparently dictated it, they are these: Coal can be obtained there and ashes can be taken away by cars; the railroad tracks are immediately adjacent to this site; there is a means by water of bringing soft coal in from the Cumberland district in case there should be strikes or blockades affecting railroad transportation; a large amount of water needed for condensation purposes is right there, without having to be pumped any distance; and the building that will use 25 per cent of the output of the power plant is immediately adjacent to this site—the Bureau of Engraving and Printing. That is to be the great user of the power, heat, and current.

Senator NEWLANDS. That building has a power plant now, has it not?

Mr. WETMORE. It has a plant there, but that will be abandoned. That is, the use of it will be abandoned if the central power plant is constructed.

Now it is on these particular points that that site was selected. There was a statement made here yesterday to the effect that the contract as let does not contemplate a complete plant, and that it will require substantially a million dollars to provide a complete plant. The plant which the Treasury Department is proposing to construct will be a complete plant of capacity to furnish heat, light, and power to all the buildings that are enumerated in the original legislation. It will not be without duplicate mains and duplicate feeders, as was intimated yesterday, but will include them, and the entire cost of the plant when constructed will be within the limit of cost now fixed by Congress. Now if Congress increases that limit, of course, to $175,000, as we have recommended for the four additional buildings, the plant as constructed will take care of those buildings within the limit of cost as fixed.

I make these statements especially in connection with the contract that the department will have carried out if it is permitted to, and the cost of the work, in order that there may be something in this record specifically making this declaration lest by failing to do so it might be taken that we assent to the statement which I am now controverting and thereby justify perhaps something of that kind being said hereafter on the floor of the Senate. We expressly deny that there is any foundation for the statements that have been made that the plant which the department is proposing to construct will be an incomplete plant, a plant with one arm and one leg. It will be a plant with two arms and two legs. It will comply with the requirements of the legislation that it be of capacity to furnish all these buildings with what they require in the way of heat, light, and power, and of sufficient capacity to take care of the three contemplated buildings.

Senator CUMMINS. Would it be capable of enlargement in the future if new buildings were put in this particular locality?

Mr. WETMORE. Yes, sir; the building as contracted for will permit of enlargement of the boiler and generating plant in the building. The contract as let does not require four stacks. It requires two. It was stated yesterday that the Department had availed itself under the terms of the legislation to employ expert technical assistants in designing the plant. The Secretary of the Treasury availed himself of the services of gentlemen who are eminent in their profession, and the plant as designed and as specified was put on the market for bids, resulting, as was stated yesterday, in the receipt of bids in excess of the limit of cost. By the elimination of nothing that goes to the efficiency of the plant, and simply matters that can be treated in a different way, we are getting a commercial plant that we are satisfied will answer every requirement of the service and be in strict accord with what Congress has directed should be done in this legislation.

Senator CUMMINS. Are the elevation plans here so that we may see them?

Mr. WETMORE. Yes, sir.

The CHAIRMAN. Is there a perspective of the building there, too?

Mr. WETMORE. No perspective drawing has been made.

(Mr. Wetmore here produced certain maps and blue prints.)

Mr. WETMORE. This [indicating] is one elevation.

Senator NEWLANDS. Do you contemplate adding to it eventually?

Mr. WETMORE. If the requirements are materially enlarged, it will be necessary, at some time or another, to put on more stacks.

Senator CUMMINS. What is this [indicating]; brick or stone?

Mr. WETMORE. It is brick.

Mr. SIMON. I will say, Mr. Chairman and gentlemen, that the stacks were originally to be of steel, but later the plan has been to make them of radial brick—of radial brick made especially for the construction of stacks.

Senator CUMMINS. What is the size of the building?

Mr. SIMON (superintendent of drafting division, Treasury Department). 178 feet by 126. It is about 180 feet from the ground.

Mr. CASS GILBERT. Since it was submitted to the Commission of Fine Arts in January, the change has been made with regard to the number of stacks. I simply make that statement in connection with our statement made yesterday, and the statement of record in the hearings of the commission. It was 195 feet from the river. The statements made before the Commission of Fine Arts were taken down stenographically and——

The CHAIRMAN. I suggest that we allow Mr. Wetmore to finish his statement, and then we will take up this matter that you refer to. Mr. Wetmore, do you care to say anything further?

Mr. WETMORE. I think that is all the statement I care to make at this time, just outlining the situation.

The CHAIRMAN. Have you in your office an elevation showing just how the building would look after it was constructed?

Mr. WETMORE. Nothing except this [indicating].

The CHAIRMAN. But one can not tell very well from that. That is a mere blue print of it. I would like to get some idea, if I could, how it would really look to the eye. This [indicating] is brick with stone trimmings, is it?

Mr. WETMORE. Yes, sir; that much of it is laid out in brick to show where the brick comes to, but it will be all through here. This is stone [indicating].

The CHAIRMAN. Which is stone?

Mr. WETMORE. This; this is the foundation.

The CHAIRMAN. This is granite, I suppose?

Mr. WETMORE. A granite base; yes, with limestone trimmings.

Mr. SIMON. The drawing you ask for is a perspective drawing which we have not.

Senator CUMMINS. Mr. Chairman, you have imagination sufficient to know how it will look.

The CHAIRMAN. No; I have not, because I do not know the kind of stone, the sort of brick, or the color effect, or anything about it.

Mr. SIMON. The brick is tapestry brick.

Senator NEWLANDS. Mr. Wetmore, how was it that these plans were not submitted to the Commission of Fine Arts before the contract was let?

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Mr. WETMORE. This was a project that came in the office in a slightly different form from the ordinary work that we have to do. Congress ordinarily authorizes our public-building work in the omnibus bill, and we have divisions there that each handle a separate branch of work. In this case and in the case of the Interior Department building, the appropriations committees not wanting to do anything that would interfere with the regular program of building work, provided an extra force that we could use on these particular projects, and the then Supervising Architect deemed that it was the best thing to establish within his office two small groups, one to handle the Interior Department building and one to handle this building outside of the regular office routine and force. He himself assumed to take charge of this work. He kept the more important records in his own room and gave his own personal direction to the matter. The chiefs of divisions who would ordinarily have handled this class of work in the office were not called intimately into conference, and had no direct control of this work. Evidently the Supervising Architect—I can say that I am satisfied with no intention on his part—failed to get these plans to the Fine Arts Commission. I know he would not have purposely withheld them, but after he had gone out of the service the work was put into the divisions as fast as it could be done to be handled by them in the routine way, and it was generally supposed in the office that the architect had attended himself to all the necessary details that were required, as far as he had handled the matter. He had not, it appears, submitted these plans to the Fine Arts Commission. I do not understand that the Fine Arts Commission—as was suggested by some one this morning—made a protest that these plans had not been sent to them. They merely called attention to the fact that they had not had them, and they were immediately sent there. Mr. Gilbert, representing the Fine Arts Commission, stated yesterday that the commission was not charging the department with purposely holding back these plans.

Senator NEWLANDS. I would like to inquire when the Supervising Architect withdrew from the Treasury.

Mr. WETMORE. In April of last year.

Senator NEWLANDS. And since then you have been Acting Supervising Architect?

Mr. WETMORE. Yes, sir.

Senator NEWLANDS. It is customary in the Supervising Architect's office to submit to the commission the plans of all buildings put up by the Government in the District of Columbia?

Mr. WETMORE. Yes, sir.

Senator NEWLANDS. And you supposed that this had been done by the Supervising Architect?

Mr. WETMORE. Yes, sir.

Senator NEWLANDS. As a matter of fact, however, it was not done until the contract was let.

Mr. WETMORE. It was not done until after the contract was made.

The CHAIRMAN. And when you found it out you reported the fact to the Arts Commission?

Mr. WETMORE. They called our attention to it and we sent them on at once.

(Mr. Wetmore was thereupon excused.)

STATEMENT OF N. S. THOMPSON, DIVISION OF MECHANICAL AND ELECTRICAL ENGINEERING, SUPERVISING ARCHITECT'S OFFICE, TREASURY DEPARTMENT.

Mr. THOMPSON. Mr. Chairman and gentlemen, I do not think I can add anything to what Mr. Wetmore has already said. He has stated our side of the case a great deal more clearly than I could.

I think the location of the power plant, from an engineering standpoint, is ideal. I think the building is of high character and suitable for the purpose. I think Mr. Stillwell's engineering was exactly right, of putting these stacks on. If he had left the stacks off he would have had to substitute induced draft, which would have necessitated, from an engineering standpoint, economizers. That action would have added to the cost of the plant, as I roughly calculate, about $88,000. It would not have been an economic proposition to do it, under the engineering conditions prevailing here. A man, as a rule, does not go to an induced-draft proposition unless there are peculiar economic or engineering reasons for so doing. I do not think any engineer would omit a stack for an esthetic reason. I should not, and I do not think Mr. Stillwell would. That is, soon after he had made the calculation as to the cost of the stacks and the cost of these economizers, and induced-draft fans, if the first cost was higher than that of the stacks, and it costs more to run this plant with induced draft than with the stacks, I do not think any engineer would substitute induced draft for stacks.

The matter of the site for the central power plant was thrashed over before Mr. Fitzgerald's committee, and it looked like an ideal site to us—down there on the river front alongside of a railroad track and on property owned by the Government—that it met all the engineering features of an ideal plant; was close to the center of gravity of the load; coal could be gotten easily to it and ashes could be taken away both by water and rail, and we had condensing water within a very short distance. That is, the A B C of engineering dictated the locating a power plant on the site selected.

As Mr. Wetmore has stated, the heaviest load on this plant is the Bureau of Engraving and Printing, which will take pretty close to 45 per cent of the steam and practically 35 per cent of the electrical current produced by the central plant, and it is a very short distance to transmit this heavy load. The lighter buildings are further up at a greater distance. We are within the economical distance from the plant to distribute steam. We send steam about 6,000 feet, which, at the pressure which Mr. Stillwell figured on, is good engineering. The electrical end of it is very simple. You are well within an economical radius, and if I had the problem to look over again I can not for the life of me say that I would put that plant at any other place than where it is now. It selected itself.

The CHAIRMAN. It could not be put in that direction below where there are so many of those other industrial plants down in Washington, could it? Would that be too far off?

Mr. THOMPSON. I am afraid you would get out of the economical radius for the distribution of steam. So far as the electrical end is concerned——

The CHAIRMAN. What is your view about having the Capitol plant up here take charge of this work as well as that?

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Mr. THOMPSON. It is a question——

The CHAIRMAN. Of course you would have to increase the plant.

Mr. THOMPSON. You would have to increase the plant, and you are going outside of the bounds of first-class engineering and steam distribution to carry it that distance.

The CHAIRMAN. But we have got to contemplate this from a dual aspect. It is not simply an engineering matter; it is an art proposition and an engineering matter both, and we want to try to satisfy both conditions as well as we can. Mr. Elliott Woods, the supervising architect up here, has written a letter, and sometime later I would like you to read it.

Mr. THOMPSON. I heard it yesterday.

The CHAIRMAN. Then I would like to have you write me a letter telling me about what this plant would cost as compared with what you think the changes down here would cost. I think everybody has agreed that purely as an engineering proposition, from that standpoint alone, the site is a proper one. I do not think there is any objection to that on any ground.

Mr. THOMPSON. Of course I have to treat it like I have to treat everything before you gentlemen when we come from the department. We have to treat it as engineers and from the economic standpoint; that is, we must pay interest and depreciation on this investment, and we must earn the Government a dividend. Now, if you put too much money into this proposition—a plant of this character—you would be unable to pay your sinking fund charges and pay the Government a dividend.

The CHAIRMAN. I understand that, but Congress has decided differently from that view. It has constituted an art commission and requires all these things to go to it. So the art side of it should be considered and not merely the mechanical engineering side.

I simply mention that in order that you may not waste time upon it because I do not think anybody disputes that, that is, mechanically, the best site. I do not think that it is disputed by anybody from a purely engineering and economical standpoint.

Mr. THOMPSON. But in considering the enlargement of the Capitol plant you would want to know whether it was first, good engineering and good economics.

The CHAIRMAN. Yes; and because from the face of the papers before me right now, it seems that it might be possible, if not practicable, possibly at any rate—practicable with regard to the heat, and practicable with regard to the light, at any rate, possibly with regard to power and heat—to make the Capitol plant here with additions that will cost less than this new plant, do the work. I merely call your attention to it so that you can write a letter upon the subject that we may have both before us.

Mr. THOMPSON. Well, we felt that the time this matter was taken up before Mr. Fitzgerald that the natural subdivision of the power requirements of the Government would require a power plant for the legislative branch and a power plant for the executive branch—two great branches of the Government.

I do not think the Committee on Appropriations felt receptive to the idea of enlarging the Capitol power plant and serving the executive end of the Government as well as the legislative. Now, whether

that is valid or not, that is beyond me; but I am in thorough sympathy with that viewpoint.

The CHAIRMAN. Do not misunderstand me. Mr. Woods has made no recommendation. He has simply written a letter at our request. Is that all you care to say, Mr. Thompson?

Mr. THOMPSON. Yes, sir. If there is to be any further hearing we would like to be heard.

The CHAIRMAN. Mr. Gilbert, do you care to say anything further?

ADDITIONAL STATEMENT OF MR. CASS GILBERT, ARCHITECT, NEW YORK.

Mr. GILBERT. I do not think I have anything more to say, except that I would like to, as courteously as possible, correct an impression that we may have possibly given to the committee inadvertently, conveying a wrong idea as to the number of stacks.

The plans submitted to the Commission of Fine Arts show four stacks. I scaled the plans hastily and found that the height of the stacks was about 180 feet. We asked the question of Mr. Thompson as to the height and he stated it to be 188 feet. The measure of the grade above the water is 7 feet. I do not think the height of the stacks above the water is 195 feet. There are four stacks shown, not only on the plan but on the elevations, and any change that has been made has been made subsequently to the submission, or at least the Commission of Fine Arts was not informed as to that.

I think I might say that it is probable that the Commission of Fine Arts would have found as much objection to one stack—or almost as much objection to one stack—as to four in that location. I am not authorized by the commission to say that. It is not the number of stacks, but it is from the standpoint of defacement of the location by that type of building, in that way.

Senator CUMMINS. Your suggestion is that it is unsightly?

Mr. GILBERT. Yes, sir; it is unsightly. That is as far as our function goes. We have no authority to go beyond that.

Senator CUMMINS. Is there any power plant that could be put there that would not be unsightly from your standpoint?

Mr. GILBERT. Yes; I think there is provided it was low enough. That, perhaps, also raises the question which appears in the act of Congress which was sent or which was referred by us in consideration of the matter, namely, erection at the same time in this connection, of an asphalt plant, but no plan has yet been submitted and I understand none has yet been made. But we should take that into account also as it was part of the act authorizing this construction, as we understood it. Our inquiries went somewhat into technicalities, because we wanted to ascertain if this plant could be made low enough so as not to constitute an important feature in the landscape. I went into that at some length yesterday.

Senator CUMMINS. I was not here yesterday.

Mr. GILBERT. The height of the boiler floor is stated to be about 20 feet above the street. There are several reasons for that which the engineer could state. They seem to be adequate engineering reasons. There was some reason I could not quite see why the engine room should be about from 40 to 50 feet, I believe—the real figure is about 53 feet to the underside of the ceiling from the floor—why a lower

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engine room might not be better, or at least useful. There was some engineering reason, and possibly some architectural reasons, for bringing the matter to one level. As to that I have no information, but, of course, as has been suggested—and I understand I am answering your question as to whether a lower building could be put there—the stacks could be eliminated entirely, practically put down to almost the level of the roof by the use of forced draft. The question of its economies, first cost, and cost of operation, are all questions of an engineering character which we have no means of ascertaining now from the standpoint of our commission.

We did, however, take into consideration a very grave question as to whether that would produce an unfavorable effect upon the trees of the Mall by reason of gases discharged from a low plant. The suggestion was made informally that possibly the Bureau of Standards might be able to shed some light on that question. We do not know. We have not consulted them. They at least raised that question which we thought it wise to bring up.

Senator CUMMINS. Passing that, however, in your opinion there could be a plant erected on this land that would not be objectionable; merely a matter of cost?

Mr. GILBERT. I would answer that in this way: That there could be a plant erected there which would be very much less conspicuous. I anticipate—quite frankly, as an architect, speaking now from my own point of view and not for the commission—that unless a plant was erected there without stacks you would find, as Mr. Thompson has said, or as I understood him to say, that the cost of operation would be greater by the forced-draft system. I think also you would find that the gases in the immediate neighborhood, if not for some distance, would be very unpleasant, and you will come a little later on to the erection of stacks, and then you would have a location which would impel you to build your stacks. I had to meet that same problem some years ago as an architect at the Minnesota State Capitol. The commissioners ordered me to design a plan for its power house some distance from the building without a stack, and they did not want to mar the composition. The suggestion was direct. We built it with a forced-draft system—this is at St. Paul, Minn. After the plant had been in operation a few months there was so much complaint of gases arising from this low stack and being disseminated out over the neighborhood that the the commissioners felt impelled to order a high stack—a relatively high stack—put up, and I was instructed to have the stack put up, and it was put on. We found at that time that the expense of operating this forced-draft system was not very great, relatively; that was not the reason. The change was made for the reason of the gases arising, possibly. That may have happened because of the kind of coal used; it is remote from the coal fields, and there may have been some question of that sort; I do not know.

The CHAIRMAN. The gases are not only disagreeable but destructive to vegetation, are they not?

Mr. GILBERT. They were in that case a subject of very general complaint in that neighborhood.

The CHAIRMAN. They would be in any case, would they not—being close down to the ground?

Mr. GILBERT. They would.

The CHAIRMAN. Have you ever discovered any method of collecting these gases and utilizing them as a by-product?

Mr. GILBERT. That question arose informally in the Arts Commission. Mr. Herbert Adams, of the commission, made an inquiry of one of the most distinguished engineers—I think I am justified in saying who he was; it was Mr. Wilgas, who was chief engineer of the New York Central Road and who had had a great deal of experience in various other roads; I am not authorized by Mr. Wilgas to express his opinion, except to simply state that he said that in certain important plants on the Pacific coast, or in the mining districts of the West, gases arising from stacks have destroyed the vegetation for many miles around, but that by reference to the Bureau of Standards in Washington some corrections were made which have eliminated that disadvantage, and a by-product of some value was produced. He did not state the point or location, but simply threw that out and invited our further inquiry into that line, but the Commission of Fine Arts is absolutely without funds to provide for an inquiry of any kind. I think there are sufficient funds to hold another meeting; so we have not made any investigations.

Senator NEWLANDS. In that connection, what was the original appropriation made for the Commission of Fine Arts, annually?

Mr. GILBERT. I think it was originally $10,000.

Senator NEWLANDS. And that was reduced to $5,000.

Mr. GILBERT. That was, I believe, reduced to $5,000.

Col. HARTS. That is correct, but last year Congress gave us $1,000 more.

Mr. GILBERT. We receive no slaries.

Senator CUMMINS. I want to pursue this question a little further. Assuming that there is no way of avoiding the effect of the gases, that means that any power plant erected in Washington must have a stack; you could not erect it anywhere unless it had.

Mr. GILBERT. It is not possible unless scientists can find a way of eliminating it.

Senator CUMMINS. Suppose it is not practicable to enlarge the Capitol power plant, have you reached any conclusion with respect to the proper location of a new plant?

Mr. GILBERT. No, sir; we have not. We have not gone into that.

Senator CUMMINS. Does your general knowledge enable you to indicate to us any proper location now?

Mr. GILBERT. No; not now. I will have to remind you that the function of the Commision of Fine Arts is very limited; we have no initiative whatever. We can only act on matters that are submitted. If it was submitted or referred to the commission, and inquiry could be made as to the location, what would be the most advisable location, we could then take that up.

The CHAIRMAN. I may be mistaken about it, but if I am not, you are—I think in the original inquiry put to the commission it was asked to give an opinion concerning the site as well as the other matters.

Col. HARTS. There was a recent request that came in about two days ago, but we have not been able to reply to that.

The CHAIRMAN. I was not talking about that, but the inquiry prior to that. The first inquiry received from the Fine Arts Com-

mission said that this matter had been referred and that they had been asked several questions, and you wrote us a communication. That was prior to my letter to you.

Col. HARTS. Yes, sir.

The CHAIRMAN. If my recollection is correct, you were asked in that letter to give your opinion concerning the site.

Col. HARTS. Not a new site. The question was only one of——

The CHAIRMAN. It is very probable I am mistaken.

Senator CUMMINS. It is a building that we could not move up the river. If it was moved up it would have to be moved down the river.

Senator NEWLANDS. Why could it not be moved up the river near the brewery?

Senator CUMMINS. Because it would be unsightly there; unless it was moved beyond the Lincoln Memorial it would be more unsightly than it is now.

Mr. GILBERT. I will read the communication:

TREASURY DEPARTMENT,
Washington, January 14, 1916.

CHARLES MOORE, Esq.,
Chairman the Commission of Fine Arts, Washington, D. C.

SIR: The public-buildings act of June 23, 1913, authorized the construction in this city of a building for a central heating, lighting, and power plant to serve certain buildings enumerated in the act. According to that authorization, drawings for the new building have been prepared and prints of the elevations, plans, and sections are forwarded to you to-day, under separate cover, for such comment as the commission may desire to make thereon.

Respectfully,

W. G. MCADOO, *Secretary.*

The CHAIRMAN. Evidently I was under a misapprehension. Since then I have written a letter which does raise that question and you can take it into consideration.

Mr. GILBERT. Yes, sir.

The CHAIRMAN. Now, it seems to me that it might be very well for us to get somebody in connection with the Bureau of Standards and ask him if there is any way of collecting these gases so as to prevent their escape—if they can be collected so that a by-product may be made out of them that will not cost the Government too much net in the process—and then we could solve the stack question and the obtrusiveness of the stacks and the art and landscape questions easily. I have read somewhere that the Germans were doing that all the time and making very valuable by-products.

Assistant Secretary NEWTON. May I ask Mr. Gilbert one question for our guidance?

The CHAIRMAN. Certainly.

Assistant Secretary NEWTON. I would like to know, Mr. Gilbert, in your opinion, based upon your judgment and knowledge, if, operating under the advice that you propose as to the forced draft, as you call it, dispensing with the stacks, if the gases which would be thrown out on that level in our nostrils would be injurious to human beings? I would like to ask you the further question, placing that project down there by the riverside, remote as it is from the main part of Washington, do you think that would be a greater offender on the face of the landscape and to the esthetic sense of Washington

than the Potomac Power Plant stacks, right here in the heart of the city?

Mr. GILBERT. Mr. Secretary, I will have to answer each question separately. I will have to preface by saying that I am not a scientist nor a chemist, and my knowledge of gases is very limited. I will state that I occupy for my personal office in New York the top story of a 15-story building on Twenty-fourth Street, across the street from the Metropolitan tower. The Metropolitan Life Insurance Building was built in a small section, gradually extending over the block, and finally, with its great tower. This power plant was put in for its original section. When they built the tower they seemed to have discovered that the gases there from the low stack were very injurious to their tenants in the tower. They therefore put a trunk line of some sort on the roof a considerable distance down the block—the building is a long block; I do not know how long, but several hundred feet—and discharged the gases but no smoke. My office is across the street and part way along the block, about two stories above the level of the roof, or three stories above the level of the roof of this Metropolitan Building, and in the summer, when my windows are open, I get so strong a smell of gas that it was impossible for me to continue my work there, and I had to close my windows.

That is a personal experience. Now, if that is produced from one stack for one building, it seems to me reasonable to suppose that four stacks supplying 17 buildings will produce a considerable increased degree of gases of some sort or other that would be unpleasant, to say the least.

Now, to answer the other question. I do not want to sidestep it, Mr. Secretary, by saying that it has not been referred to us, as to whether these other power stacks are desirable or not, but I think that you would concede that they are not objects which add to the beauty of Washington, and if they could be eliminated or some of them eliminated under some scientific conditions, it would be a great boon to the Capital.

I would like, while I am on my feet, to say one more word. There are a great many engineering questions which we believe could be properly studied—and I mean no reflection upon the engineers who have been over it, but I mean if broadly studied, that is the better word—broadly studied in all their relation to Washington from every standpoint of use of various fuels, oil-producer gas, hard coal, distant transmission, electric heating, air-tube system for some local place like Lincoln Memorial, which needs no stack, operated by gas flames as in the New Haven Public Library or the Spalding Building in Portland, Oreg., where power is transmitted, as well as light from a distance. A local plant in a 13-story building without a boiler plant in it or a particle of steam can be applied to the Lincoln Memorial, for example, and possibly to some of the minor buildings, although it could not well be applied to old buildings.

That would solve the small local problems advantageously and economically, but first get at the details and have the whole situation in Washington studied.

I have been informed that in London there came before the London County council a few years ago, the question of dealing with this very question. I believe it was said there were some 62 separate public-service power plants for heating, lighting, and power.

Lithomount Pamphlet

They had gone on from one step to another without a general or broad scheme of development. It came to an inquiry as to the amount of invested capital. I think it was stated that it amounted to over £15,000,000, I am not sure, I will not be responsible for those figures, but it was an enormous sum of money. That same situation, in a lesser degree, may some day come up in Washington, and it would seem wise at this time, when the immediate exigency exists, because it is not a matter apparently of emergency—the only emergency is the existing contract—it would seem wise to make a very broad study of the whole question.

Mr. Chairman and gentlemen, I hope you will excuse me for taking up so much of your time.

Mr. WETMORE. May I ask you a question?

Mr. GILBERT. Certainly.

Mr. WETMORE. You referred to an asphalt plant in the original legislation. Was it the understanding of the Fine Arts Commission that that asphalt plant had been authorized to be constructed?

Mr. GILBERT. No; it was not.

Mr. WETMORE. How far was the Fine Arts Commission influenced in their finding because of this reference of the asphalt plant in the legislation?

Mr. GILBERT. Not seriously, but it gave us some anxiety as to what might follow, because the act speaks of provision for a future asphalt plant.

Mr. WETMORE. I had gathered the impression perhaps that you thought the plant was authorized, because you said there were no plans submitted to you.

Mr. GILBERT. No; I did not want to imply that. I want to assert now that the commission makes no criticism whatever of the Treasury Department. In fact, our relations have been peculiarly pleasant.

The CHAIRMAN. The asphalt plant was contemplated in the act as a possible sequence?

Mr. GILBERT. Yes, sir; it was.

(Mr. Gilbert was thereupon excused.)

The CHAIRMAN. Mr. Stillwell, do you desire to say anything further?

ADDITIONAL STATEMENT OF L. B. STILLWELL, CONSULTING ENGINEER.

Mr. STILLWELL. I think I have no further statement to make, Mr. Chairman, unless you have some questions to ask me. I said yesterday all that I had to say.

Senator NEWLANDS. I did not know but that this inquiry may have suggested something to you. Mr. Stillwell, would you deem it a wise thing, as a mechanical engineer and a man of experience in these matters, to have at this time a board and comprehensive survey made of this question of supplying the Government buildings with heat and light?

Mr. STILLWELL. Senator, I have no hesitation in answering that question in the affirmative, because I had made that suggestion some time ago to the officials of the Treasury Department. An engineer perhaps is like other professional men, liable to exaggerate the relative importance of his specialty, but the uses of power in modern

life are increasing so very rapidly that one must recognize the fact that in order to avoid great waste of money and of effort in the growth of our communities it is necessary to plan for your power development far in advance and on a comprehensive and symmetrical scale.

It would be very difficult to make a guess as to the amount of money that has been wasted or the apparatus that has been scrapped, particularly in this country, by a failure to make a broad study of such problems at the outstart. In Europe they have a number of cases, to one of which Mr. Gilbert has referred as the most striking. In that case the £16,000,000 which parliamentary inquiry determined to be necessary to amortize in some way in order to make it possible to adopt a modern method and have the whole supply come from one or two central sources did not represent all the money that had been put in but represented the amount that could not be utilized in connection with the extensions. It was something that had to be written up in some way and charged up to something, and they did not get out of that difficulty. When the war broke out they were still going on with their 62 plants, supplying not quite 62 kinds of service but a great variety of service.

Now, in New York, Chicago, and Boston, in practically all of our large cities, at great expense the public utilities corporations supplying the general power service have, after building many small plants here, there, and everywhere for various purposes, thrown them away and substituted new large central stations.

So, I decidedly think that in this Capital City, where you have so comprehensive and admirable a plan for the development of the city in the future, that there should be an equally comprehensive plan for the power supply. I thank you gentlemen.

The CHAIRMAN. We will now hear Mr. Simon.

STATEMENT OF L. A. SIMON, SUPERINTENDENT OF DRAFTING DIVISION, SUPERVISING ARCHITECT'S OFFICE, TREASURY DEPARTMENT.

Mr. SIMON. I will say, Mr. Chairman, that I am superintendent of the drafting division of the Supervising Architect's Office. It has been explained that while this project has emanated from the Supervising Architect's Office it did not go through the usual channels; it was not handled by the various divisions of the office. It was handled by a set of men who form an interior office of their own, as it were, and we had nothing whatever to do with it.

I simply came here to answer any questions from any architectural standpoint that the committee might care to ask me. The matter has been gone over so very thoroughly that it seems quite unnecessary for me to take any time in repeating what has already been said.

The CHAIRMAN. Your testimony would relate particularly to the plans in the office, would it not?

Mr. SIMON. Yes, sir.

The CHAIRMAN. Would it cause you much trouble to get up a perspective of this building without any additional expense?

Mr. SIMON. Not a serious expense.

Lithomount Pamphlet

The CHAIRMAN. I think it would be very well if the various committees could have it, especially the Committees on Appropriations, when they come to consider the matter.

Mr. SIMON. You mean a perspective drawing which would give the layman a better idea of the appearance of the building?

The CHAIRMAN. Yes; the color effect and the form effect. All in one—the perspective from the four sides.

Mr. SIMON. When we get into anything like a color perspective it runs into some expense. In this case, however, our ordinary appropriation would permit us to pay it.

The CHAIRMAN. We do not want to have any new appropriations.

Mr. SIMON. The men who drew the plans had $35,000, and that has all been expended.

(Mr. Simon was thereupon excused.)

Mr. WETMORE. Mr. Chairman, I was called out of the room when Mr. Thompson was making his statement. Mr. Thompson is our engineer, and I would simply ask him whether he covered the matter of the proposed use of this plant in connection with the proposition for utlizing the Great Falls project.

The CHAIRMAN. No; he did not.

Mr. WETMORE. I would like to have him say something on that subject.

Mr. THOMPSON. If this Great Falls project goes through, as I am convinced it will, it will be a very simple matter to connect it to this plant as we have it now, by making an arrangement for putting a substation just back of the old city post office. The Great Falls station would feed its power down into that substation. This new station would also feed in there, making this new station the absolutely necessary steam auxiliary for the hydroelectric proposition up the river. It will have to have a steam auxiliary; that is conceded by Mr. Hirshell and all the engineers.

Senator CUMMINS. There would not be such a great necessity for the stacks then?

Mr. THOMPSON. Yes, sir; because you have to generate steam. It is to be used when the water in the river is not great enough.

Senator CUMMINS. I know, but the cost of induced draft would be much less if they were only run part of the time.

Mr. THOMPSON. No, sir; you would have to make your capacity to meet the maximum.

Senator CUMMINS. I know the original cost would be as great, but the cost of operation would not be, would it?

Mr. THOMPSON. No, sir.

The CHAIRMAN. Is that all you wish to say?

Mr. THOMPSON. Yes, sir; except if there was a steam auxiliary and hydroelectric plant up the river, we figured on running the hydroelectric plant for 180 days in the year. We would have ample water power, but the balance of the year this would have to carry the load because there is not enough water throughout the year to keep it going.

Another matter, a gentleman suggested the use of burning oil as fuel, the purpose being to let us reduce the height of this plant. I told them that the cost of fuel oil per barrel in Washington markets now, to-day, is about $3.50 a barrel. Three barrels of oil is equal to a ton of coal. I expect to burn 30,000 tons of coal in this plant.

Senator NEWLANDS. Per month?

Mr. THOMPSON. Per year—at $2.77 a ton. So the effect of burning oil at this time would be to add a cost to the Government of $90,000 per annum.

Senator NEWLANDS. Mr. Chairman, Mr. Jennings would like to ask the witness a question.

Mr. HENNEN JENNINGS. If I may be permitted. I gave some testimony yesterday in a general way and made the statement that I was an engineer. Now, Mr. Thompson, your statement regarding the economy of that plant, the position of that plant, has not been made clear to me by your testimony at all. By this scheme for your Government buildings, including the Government Printing Office and the Post Office and the Capital Traction, you will be running three plants. I have not gone into the figures nor do I pretend to know, but all of our modern engineering is toward concentration, and here we have a diffusion of plants—three plants. Now I admit that it is better to be near the water for condensing purposes, but that is not a great item, and the interest on the amount of money you have already put into that Capitol plant will balance that handicap, I believe, and if you enlarge it so that it serves not only what you are doing, but the Bureau of Engraving and Printing and the Post Office, you will be nearer the center of distribution than the site that is chosen. Will you please tell me wherein I am in error?

Mr. THOMPSON. I will try to tell you. When the proposition is put up to an engineer to locate a power plant, the basic conditions are these: The location at a point where coal can be obtained, preferably from two sources, water and rail; secondly, the ease of getting ashes away either by water or rail; thirdly, the ability to get condensing water in large volume easily.

The CHAIRMAN. I think you made that statement clear when you made your first remarks.

Mr. THOMPSON. I was replying to Mr. Jennings's questions.

The CHAIRMAN. I think we understand the situation. We will now hear the next witness.

STATEMENT OF COL. W. W. HARTS, SUPERINTENDENT OF PUBLIC BUILDINGS AND GROUNDS; ALSO SECRETARY OF THE COMMISSION OF FINE ARTS.

Col. HARTS. I do not know, Mr. Chairman, just what information you desire me to give.

The CHAIRMAN. You know the general subject matter of the inquiry. The main thing is to give your opinion and state, of course, how you are connected with the inquiry—in what capacity.

Col. HARTS. As secretary of the Commission of Fine Arts I made inquiry of the Treasury Department officials, after I had noticed that a contract for a new building had been let, to see whether it had been submitted to the Commission of Fine Arts, and, if not, whether it could be, so that we could perform our functions in accordance with the law. The plans then came very soon, and I found that it meant the erection of a building which, from my point of view, was in a very objectionable place on account of the character of construction, but not being an architect and not knowing the importance of

this I had it referred to a subcommittee of the Fine Arts Commission in New York, of which Mr. Gilbert was chairman.

The CHAIRMAN. Who were the other members?

Col. HARTS. Mr. Hastings, Mr. Adams, and Mr. Blashfield, but Mr. Hastings was absent.

The CHAIRMAN. What are their occupations?

Col. HARTS. Mr. Hastings, like Mr. Gilbert, is an architect. Mr. Adams is a sculptor. They were all three so concerned with regard to the inquiry that seemed likely to happen to a very important part of Washington, so far as its beauty was concerned, that they suggested a meeting of the Fine Arts Commission be called to discuss the question. The meeting was called on very short notice, but a full membership was obtained, and the members were all very much concerned, for fear this building was going to be a step backward in the development of the city—the erection of four brick smokestacks nearly 200 feet high, 16 feet in diameter, in a part of the city where the Government is now spending millions of dollars for its beautification seemed an unnecessary thing to do.

The CHAIRMAN. Meanwhile, Colonel, you understand that the smokestacks have been reduced to two. Do you think that affects the proposition?

Col. HARTS. Only for the present. The plans contemplate four. The reply to the Secretary of the Treasury's letter was thereupon decided upon and returned as soon as it could be prepared, condemning very positively, from an artistic point of view, the construction of this building as proposed.

This matter has been the subject, apparently, of a good deal of comment among architects in Washington and elsewhere, and the subject has been expanded to include other subjects that were never contemplated; that is, the question of economy, for instance.

If there is any further information I can give I shall be glad to do so.

The CHAIRMAN. No; I think that is all. Now, gentlemen, I may state to you that this committee has no permission to sit really while Congress is in session and I do not feel at liberty to continue the hearings without such authority. The regular meeting day of the committee has been fixed for Tuesday, and at some other time when there is a regular meeting, if there is anyone else who desires to be heard, they can appear before the committee for that purpose. I now declare the hearing temporarily adjourned.

Mr. WETMORE. Mr. Chairman, we may want to have a chance for closing, as you suggested.

The CHAIRMAN. You are at liberty to put in the record any statement in writing that you desire. That also applies to any other gentleman who has not had the opportunity to be heard orally.

STATEMENT OF MR. E. C. KEMPER.

Mr. KEMPER. Mr. Chairman, I am glad to make a statement on behalf of the American Institute of Architects. The institute is the prefessional national organization of the architects, with 40 chapters throughout the country. I am not an expert of any kind or an architect, and what I have to say can be briefly stated.

I appear here as the executive secretary or business representative of the institute. Unfortunately, none of its national officers are in

'ashington at the moment, but I have received letters and telegrams om Mr. Burt L. Fenner, of New York, its secretary, and Mr. John awrence Mauran, of St. Louis, its president, directing that no stone left unturned to bring before this committee and Congress the rong disapproval which the institute entertains for the threatened complishment of this project. Mr. Mauran is now on his way here, it arrives too late for this particular hearing. We desire it to ap- ear of record that the American Institute of Architects indorses ithout qualification the report of the Fine Arts Commission. Its apters and members are protesting against this location of the ant by telegraph to Senator Martin and Congressman Fitzgerald, the House and Senate Appropriation Committees. We are re- iving many such telegrams at the Octagon. Mr. Fenner telegraphs is morning that the Merchants' Association of New York passed nanimously a strong resolution condemning the proposed power ant and that the Chamber of Commerce of New York has done kewise.

The institute has taken a very active and public-spirited part in the velopment of the plans for the Mall and in this way has done much past years for Washington, and it hopes to do much in the future. s disinterested service is prompted by pride in the National Capital a desire to see that the people of the Nation and Washington have e best in architecture and not the worst, and a desire to be of sistance in solving problems which are from their very nature oblems for the architectural profession.

This committee has heard Mr. Cass Gilbert and Col. William arts, both of the Fine Arts Commission, speak in detail of the sthetic features of this proposed power plant. Both condemn it as nproperly located and a disfigurement to the Mall. You have ard Mr. Jennings and Mr. Stillwell, qualified engineers, speak ncerning the economic and engineering features of the project. oth condemn it in certain of its aspects, and raise questions as to hether the building of such a plant is the best solution of the power id heat difficulty.

There is one party greatly interested who, perhaps, has not been ard from directly and as fully as he might have been, and that is e average American citizen, the man on the street, the man who mes to Washington to see the Nation's Capital. The man who, as a xpayer, has paid or will pay for the wonderful development of the all which we have in actuality and in prospect. It is not right or ir, for the sake of a contract on a single piece of work as small as is, comparatively speaking, to disfigure, depreciate, and spoil that hich has been accomplished by erecting four, or three, or two 200- ot smokestacks on the site now selected. The point of view of the yman, the average citizen who pays for these things and suffers hen they are not properly done, is well expressed in an editorial of e New York Times of February 3, which I would like to appear the record.

DISFIGURING WASHINGTON.

Somebody is always aching to mar that beauty of comprehensive intelligent sign, that noble reach and proportion, that symmetrical plan which give the y of Washington such dignity and splendor. What genius of defacement con- ived the scheme, authorized by Congress in 1915, of a heating, lighting, and wer plant, to be built on Government property at the head of Washington

innel and foot of Fourteenth Street, or Water Street, next the Potomac
er banks? The object of this plant is to furnish heat, light, and power to
ain public buildings—the Treasury Department, the White House, the Bu-
u of Engraving and Printing, and so on, including certain buildings as yet
uilt.

The site is in an almost direct southerly line from the White House to the
tomac. There, as if with malice prepense to spoil a grand visto familiar to
l cherished by many millions of Americans, it is proposed to burden the
ound and insult the sky with a brick building some 178 feet long and between
and 90 high, to be adorned further by four titantic chimney stacks with a
ameter of 16 feet and nearly 200 feet high. This monstrous deformity, if it is
t prevented, will be an ineffaceable blot upon the comeliness, the distinction,
e ordered plan of Washington. From the new Lincoln Memorial, the Monu-
ent, the Mall, the park, from far down the Potomac, from dozens of places
equented and beloved by the public, and part of that wide, long sight and
reep of stately design, this wretched stack house would meet the eye. It would
oil the landscape It is not too much to say that it would disfigure Washing-
on, that park of the whole American people.

And the horrible enormity would probably smell nearly as bad as it would
ook. It would throw off gases for the delectation of the Smithsonian, the
ational Museum, the Bureau of Engraving and Printing, and other unfortu-
ates, including the trees in the Mall. It would be noisome to the nose, a crime
o the eye. A heaven-abrading bone-rendering establishment in Central Park
s about the only parallel to this barbarous intruder on the charm and the
omfort of Washington.

Why was such a site chosen for such a thing? To bring by water the coal
he plant will consume? Apparently no arrangements for supplying coal in that
ay are intended. It is said that this landscape destroyer won't produce much
ight and power, anyway. Certainly the public buildings which it is to serve
an be supplied adequately and much more cheaply by existing means. Finally,
t is as plain as a pikestaff that light, heat, and power generation concerns
should be tucked away out of sight. This one would deface all sights of the
Capital.

There are plenty of objections of detail to the plant, but the whole scheme
is a nuisance and a shame. The Commission of Fine Arts wasn't permitted to
see the plans until January 24. The landscape ravagers have proceeded cun-
ningly. The contracts are let. The commission, the American Federation of
Arts, the American Institute of Architects, in short, the taste and cultivation
as well as the national feeling of pride in Washington, are stirred by this secret
raid upon it. It comes up in committee conference to-day. It should be
smashed without mercy.

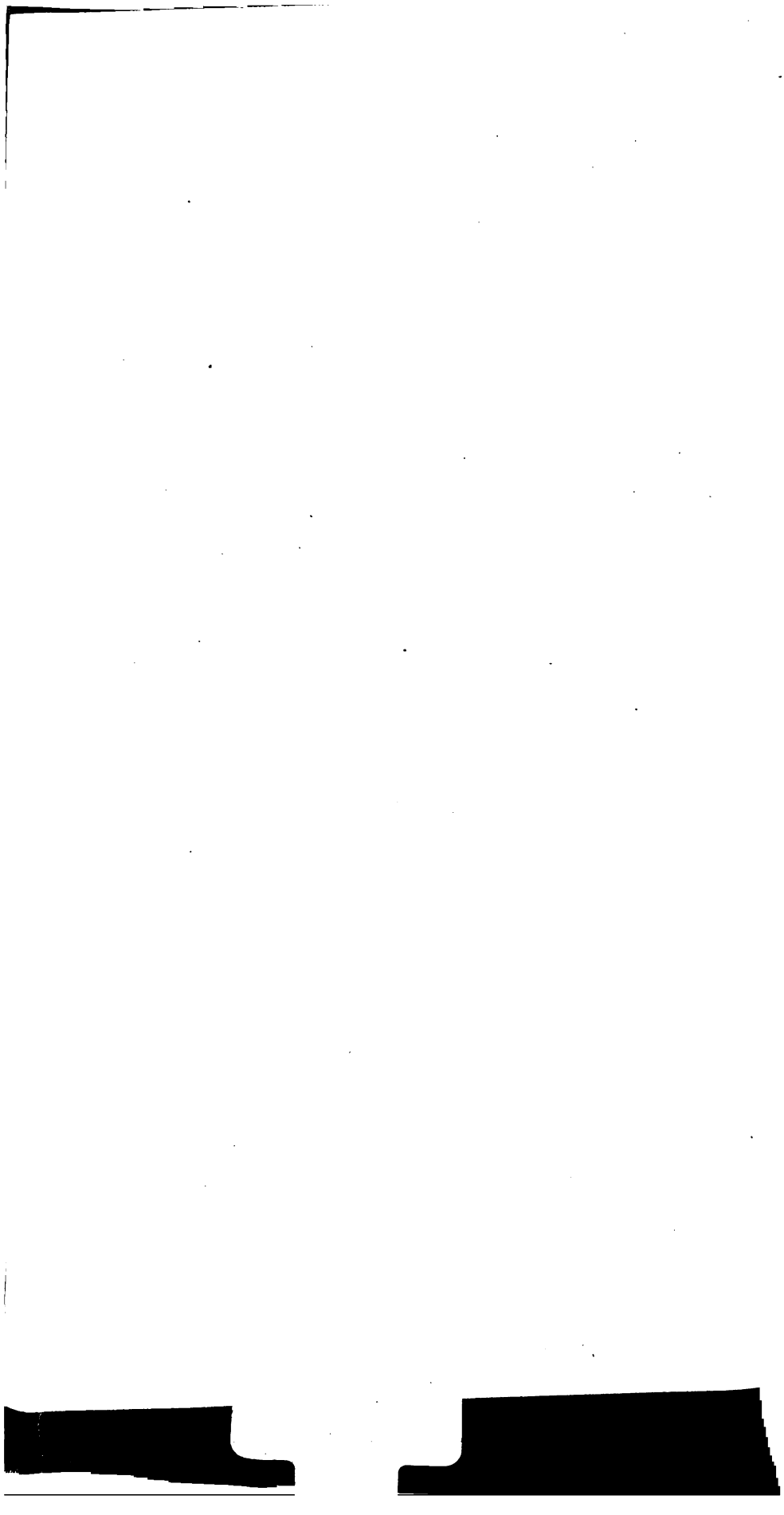
The American Institute of Architects urges a thorough investigation of this whole matter by Congress before any further work is done and before any further steps are taken under the contract. In the name of the profession of architecture it objects to the consummation of this ill-considered project.

STATEMENT OF O. P. HOOD, CHIEF MECHANICAL ENGINEER, UNITED STATES BUREAU OF MINES.

Mr. WOOD. Mr. Chairman, the Bureau of Mines is here to fulfill its function, as directed by law, of advising Government departments in matters pertaining to the use of fuel.

Reference has been made to the effect of smoke from relatively low stacks upon vegetation. There is a body of information upon this subject in the report of the Selby Smelter Commission, which is available, if the matter of lowering the stacks of the proposed heating plant on the Mall is seriously considered.

(The committee thereupon adjourned.)



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